ThinkPad

ThinkPad T500 and W500 Hardware Maintenance Manual

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Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 261.

Fifth Edition (September 2009)

Contents

About this manual

This manual contains service and reference information for the following ThinkPad® products.

ThinkPad T500
MT 2055, 2056, 2081, 2082, 2083, 2087, 2088, 2089, 2241, 2242, 2243, 2246, 2247, and 2261

ThinkPad W500
MT 4058, 4061, 4062, 4063, 4064, and 4065

Use this manual along with the advanced diagnostic tests to troubleshoot problems.

Important:
This manual is intended only for trained service technicians who are familiar with ThinkPad products. Use this manual along with the advanced diagnostic tests to troubleshoot problems effectively.

Before servicing a ThinkPad product, be sure to read all the information under “Safety information” on page 1 and “Important service information” on page 39.

Safety information

This chapter presents following safety information that you need to be familiar with before you service a ThinkPad Notebook.

General safety

Follow these rules to ensure general safety:

- Observe good housekeeping in the area of the machines during and after maintenance.
- When lifting any heavy object:
  1. Make sure that you can stand safely without slipping.
  2. Distribute the weight of the object equally between your feet.
  3. Use a slow lifting force. Never move suddenly or twist when you attempt to lift.
  4. Lift by standing or by pushing up with your leg muscles; this action removes the strain from the muscles in your back. *Do not attempt to lift any object that weighs more than 16 kg (35 lb) or that you think is too heavy for you.*
- Do not perform any action that causes hazards to the customer, or that makes the equipment unsafe.
- Before you start the machine, make sure that other service technicians and the customer's personnel are not in a hazardous position.
- Place removed covers and other parts in a safe place, away from all personnel, while you are servicing the machine.
- Keep your toolcase away from walk areas so that other people will not trip over it.
- Do not wear loose clothing that can be trapped in the moving parts of a machine. Make sure that your sleeves are fastened or rolled up above your elbows. If your hair is long, fasten it.
- Insert the ends of your necktie or scarf inside clothing or fasten it with a nonconductive clip, about 8 centimeters (3 inches) from the end.
- Do not wear jewelry, chains, metal-frame eyeglasses, or metal fasteners for your clothing.

  Attention: Metal objects are good electrical conductors.
- Wear safety glasses when you are hammering, drilling, soldering, cutting wire, attaching springs, using solvents, or working in any other conditions that might be hazardous to your eyes.
- After service, reinstall all safety shields, guards, labels, and ground wires. Replace any safety device that is worn or defective.
- Reinstall all covers correctly before returning the machine to the customer.
- Fan louvers on the machine help to prevent overheating of internal components. Do not obstruct fan louvers or cover them with labels or stickers.

Electrical safety

Observe the following rules when working on electrical equipment.

Important:
Use only approved tools and test equipment. Some hand tools have handles covered with a soft material that does not insulate you when working with live electrical currents.

Many customers have, near their equipment, rubber floor mats that contain small conductive fibers to decrease electrostatic discharges. Do not use this type of mat to protect yourself from electrical shock.

- Find the room emergency power-off (EPO) switch, disconnecting switch, or electrical outlet. If an electrical accident occurs, you can then operate the switch or unplug the power cord quickly.
- Do not work alone under hazardous conditions or near equipment that has hazardous voltages.
- Disconnect all power before:
  - Performing a mechanical inspection
  - Working near power supplies
  - Removing or installing main units
- Before you start to work on the machine, unplug the power cord. If you cannot unplug it, ask the customer to power-off the wall box that supplies power to the machine, and to lock the wall box in the off position.
- If you need to work on a machine that has *exposed* electrical circuits, observe the following precautions:
  - Ensure that another person, familiar with the power-off controls, is near you.

    Attention: Another person must be there to switch off the power, if necessary.
  - Use only one hand when working with powered-on electrical equipment; keep the other hand in your pocket or behind your back.

    Attention: An electrical shock can occur only when there is a complete circuit. By observing the above rule, you may prevent a current from passing through your body.
  - When using testers, set the controls correctly and use the approved probe leads and accessories for that tester.
  - Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.

  Observe the special safety precautions when you work with very high voltages; Instructions for these precautions are in the safety sections of maintenance information. Use extreme care when measuring high voltages.
- Regularly inspect and maintain your electrical hand tools for safe operational condition.
- Do not use worn or broken tools and testers.
- *Never assume* that power has been disconnected from a circuit. First, *check* that it has been powered off.
- Always look carefully for possible hazards in your work area. Examples of these hazards are moist floors, nongrounded power extension cables, power surges, and missing safety grounds.

- Do not touch live electrical circuits with the reflective surface of a plastic dental mirror. The surface is conductive; such touching can cause personal injury and machine damage.
- Do not service the following parts *with the power on* when they are removed from their normal operating places in a machine:
  – Power supply units
  – Pumps
  – Blowers and fans
  – Motor generators
  – Similar units to listed above

  This practice ensures correct grounding of the units.
- If an electrical accident occurs:
  – Use caution; do not become a victim yourself.
  – Switch off power.
  – Send another person to get medical aid.

Safety inspection guide

The purpose of this inspection guide is to assist you in identifying potentially unsafe conditions. As each machine was designed and built, required safety items were installed to protect users and service technicians from injury. This guide addresses only those items. You should use good judgment to identify potential safety hazards due to attachment of non-ThinkPad features or options not covered by this inspection guide.

If any unsafe conditions are present, you must determine how serious the apparent hazard could be and whether you can continue without first correcting the problem.

Consider these conditions and the safety hazards they present:

- Electrical hazards, especially primary power (primary voltage on the frame can cause serious or fatal electrical shock)
- Explosive hazards, such as a damaged CRT face or a bulging capacitor
- Mechanical hazards, such as loose or missing hardware

To determine whether there are any potentially unsafe conditions, use the following checklist at the beginning of every service task. Begin the checks with the power off, and the power cord disconnected.

Checklist:

1. Check exterior covers for damage (loose, broken, or sharp edges).
2. Power off the computer. Disconnect the power cord.
3. Check the power cord for:
   a. A third-wire ground connector in good condition. Use a meter to measure third-wire ground continuity for 0.1 ohm or less between the external ground pin and the frame ground.
   b. The power cord should be the type specified in the parts list.
   c. Insulation must not be frayed or worn.
4. Check for cracked or bulging batteries.
5. Remove the cover.
6. Check for any obvious non-ThinkPad alterations. Use good judgment as to the safety of any non-ThinkPad alterations.
7. Check inside the unit for any obvious unsafe conditions, such as metal filings, contamination, water or other liquids, or signs of fire or smoke damage.
8. Check for worn, frayed, or pinched cables.
9. Check that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

Handling devices that are sensitive to electrostatic discharge

Any computer part containing transistors or integrated circuits (ICs) should be considered sensitive to electrostatic discharge (ESD.) ESD damage can occur when there is a difference in charge between objects. Protect against ESD damage by equalizing the charge so that the machine, the part, the work mat, and the person handling the part are all at the same charge.

> **Notes:**
> 1. Use product-specific ESD procedures when they exceed the requirements noted here.
> 2. Make sure that the ESD protective devices you use have been certified (ISO 9000) as fully effective.

When handling ESD-sensitive parts:

- Keep the parts in protective packages until they are inserted into the product.
- Avoid contact with other people.
- Wear a grounded wrist strap against your skin to eliminate static on your body.
- Prevent the part from touching your clothing. Most clothing is insulative and retains a charge even when you are wearing a wrist strap.
- Use a grounded work mat to provide a static-free work surface. The mat is especially useful when handling ESD-sensitive devices.
- Select a grounding system, such as those listed below, to provide protection that meets the specific service requirement.

> **Note:**
> The use of a grounding system to guard against ESD damage is desirable but not necessary.

  - Attach the ESD ground clip to any frame ground, ground braid, or green-wire ground.
  - When working on a double-insulated or battery-operated system, use an ESD common ground or reference point. You can use coax or connector-outside shells on these systems.
  - Use the round ground prong of the ac plug on ac-operated computers.

Grounding requirements

Electrical grounding of the computer is required for operator safety and correct system function. Proper grounding of the electrical outlet can be verified by a certified electrician.

Safety notices (multilingual translations)

The safety notices in this section are provided in the following languages:
- English
- Arabic
- Brazilian Portuguese
- French
- German
- Hebrew
- Japanese
- Korean
- Spanish
- Traditional Chinese

DANGER

Before the computer is powered on after FRU replacement, make sure all screws, springs, and other small parts are in place and are not left loose inside the computer. Verify this by shaking the computer and listening for rattling sounds. Metallic parts or metal flakes can cause electrical shorts.

DANGER

Some standby batteries contain a small amount of nickel and cadmium. Do not disassemble a standby battery, recharge it, throw it into fire or water, or short-circuit it. Dispose of the battery as required by local ordinances or regulations. Use only the battery in the appropriate parts listing. Use of an incorrect battery can result in ignition or explosion of the battery.

DANGER

The battery pack contains small amounts of nickel. Do not disassemble it, throw it into fire or water, or short-circuit it. Dispose of the battery pack as required by local ordinances or regulations. Use only the battery in the appropriate parts listing when replacing the battery pack. Use of an incorrect battery can result in ignition or explosion of the battery.

DANGER

The lithium battery can cause a fire, an explosion, or a severe burn. Do not recharge it, remove its polarized connector, disassemble it, heat it above 100°C (212°F), incinerate it, or expose its cell contents to water. Dispose of the battery as required by local ordinances or regulations. Use only the battery in the appropriate parts listing. Use of an incorrect battery can result in ignition or explosion of the battery.

DANGER

If the LCD breaks and the fluid from inside the LCD gets into your eyes or on your hands, immediately wash the affected areas with water for at least 15 minutes. Seek medical care if any symptoms from the fluid are present after washing.

DANGER

To avoid shock, do not remove the plastic cover that protects the lower part of the inverter card.

DANGER

Though the main batteries have low voltage, a shorted or grounded battery can produce enough current to burn personnel or combustible materials.

DANGER

Unless hot swap is allowed for the FRU being replaced, do as follows before removing it: power off the computer, unplug all power cords from electrical outlets, remove the battery pack, and disconnect any interconnecting cables.

خطر

قبل اعادة تشغيل الحاسب بعد الانتهاء من استبدال FRU، تأكد من أنه قد تم اعادة كل من المسامير و السوست وكل الأجزاء الصغيرة الأخرى في أماكنهم ولم يتم فقدهم داخل الحاسب. ويمكن التحقق من ذلك عن طريق هز الحاسب والاستماع لأي صوت صاخب يصدر منه. قد تؤدي الأجزاء أو الرقائق المعدنية الى حدوث دائرة قصر.

خطر

تحتوي بعض البطاريات الاحتياطية على كمية صغيرة من مادتي النيكل والكادميوم. لا تقم بفك أو اعادة شحن البطارية الاحتياطية ولا تقم أيضا بالقاءها في النار أو الماء ولا تتسبب في احداث دائرة قصر بها. قم بالتخلص من البطارية كما هو موضح في القوانين المحلية. استخدم نوع البطارية المحدد والذي يوصى باستخدامه. حيث أنه قد يؤدي استخدام نوع بطارية غير صحيح الى اشتعالها أو انفجارها.

خطر

تحتوي حزمة البطارية على كمية صغيرة من مادة النيكل. لا تقم بفكها أو القاءها في النار أو الماء ولا تتسبب في احداث دائرة قصر بها. تخلص من حزمة البطارية وفقا لما هو موضح في القوانين المحلية. قم، عند استبدال حزمة البطارية، باستخدام الأنواع المحددة فقط والتي يوصى باستخدامها. حيث أنه قد يؤدي استخدام نوع بطارية غير صحيح الى اشتعالها أو انفجارها.

خطر

قد تتسبب بطارية الليثيوم في حدوث حريق أو انفجار أو حدوث حروق شديدة. لا تقم باعادة شحن البطارية أو ازالة موصل الاستقطاب الخاص بها ولا تحاول أيضا فكها أو تسخينها لأكثر من ١٠٠ درجة مئوية (٢١٢ فهرنهايت) أو حرقها أو تعريض محتويات الخانة الخاصة بها للماء. قم بالتخلص من البطارية وفقا لما هو موضح في القوانين المحلية. استخدم نوع البطارية المحدد والذي يوصى باستخدامه. حيث أنه قد يؤدي استخدام نوع بطارية غير صحيح الى اشتعالها أو انفجارها.

خطر

اذا ما انكسرت شاشة LCD ولامس السائل الداخلي عينيك أو يديك، قم في الحال بغسلهما بالماء لمدة لا تقل عن ١٥ دقيقة. اذا ما وجدت أي أعراض بعد الغسل اطلب عندئذ المساعدة الطبية.

خطر

لتجنب التعرض لأي صدمات، لا تقم بازالة الغطاء البلاستيكي الذي يحمي الجزء الأسفل من بطاقة العاكس.

خطر

على الرغم من أن البطاريات الرئيسية يكون لها جهد منخفض، الا أنه قد تقوم البطاريات التي حدث قصور بها أو التي تم توصيلها أرضيا باصدار تيار يكفي لحدوث حروق للأفراد أو تعرض المواد القابلة للاشتعال للحريق.

خطر

ما لم يتم السماح بالتبديل الفوري لأي FRU الجاري استبداله بدون ضرورة اغلاق النظام، قم بتنفيذ ما يلي قبل ازالته. قم بايقاف تشغيل الحاسب ونزع كل أسلاك الطاقة من المخارج الكهربائية وقم أيضا بازالة حزمة البطارية ثم قم بفصل أي كابلات متصلة.

PERIGO

Antes de ligar o computador após a substituição da FRU, certifique-se de que todos os parafusos, molas e outras peças pequenas estejam no lugar e não estejam soltos dentro do computador. Verifique isso sacudindo o computador e procurando ouvir sons de peças soltas. Peças metálicas ou lascas de metal podem causar curto-circuito.

PERIGO

Algumas baterias reserva contêm uma pequena quantidade de níquel e cádmio. Não desmonte uma bateria reserva, recarregue-a, jogue-a no fogo ou na água, ou deixe-a entrar em curto-circuito. Descarte a bateria conforme requerido pelas leis ou regulamentos locais. Use somente a bateria nas partes listadas apropriadas. O uso de uma bateria incorreta pode resultar em combustão ou explosão da bateria.

PERIGO

O pacote da bateria contém uma pequena quantidade de níquel. Não o desmonte, jogue-o no fogo ou na água, ou deixe-o entrar em curto-circuito. Descarte o pacote da bateria conforme requerido pelas leis ou regulamentos locais. Use somente a bateria nas partes listadas apropriadas ao substituir o pacote da bateria. O uso de uma bateria incorreta pode resultar em combustão ou explosão da bateria.

PERIGO

A bateria de lítio pode causar incêndio, explosão ou graves queimaduras. Não a recarregue, remova seu conector polarizado, desmonte-a, aqueça-a acima de 100°C (212°F), incinere-a, ou exponha o conteúdo de sua célula à água. Descarte a bateria conforme requerido pelas leis ou regulamentos locais. Use somente a bateria nas partes listadas apropriadas. O uso de uma bateria incorreta pode resultar em combustão ou explosão da bateria.

PERIGO

Se o LCD quebrar e o fluido de dentro dele entrar em contato com seus olhos ou com suas mãos, lave as áreas afetadas imediatamente com água durante pelo menos 15 minutos. Procure cuidados médicos se algum sintoma causado pelo fluido surgir após a lavagem.

PERIGO

Para evitar choque elétrico, não remova a capa plástica que protege a parte inferior da placa inversora.

PERIGO

Embora as principais baterias possuam baixa voltagem, uma bateria em curto-circuito ou aterrada pode produzir corrente o bastante para queimar materiais de pessoal ou inflamáveis.

PERIGO

A menos que uma hot swap seja permitida para a FRU que está sendo substituída, faça o seguinte antes de removê-la: desligue o computador, desconecte todos os cabos de energia das tomadas, remova o pacote de baterias e desconecte quaisquer cabos de interconexão.

DANGER

Avant de remettre l'ordinateur sous tension après remplacement d'une unité en clientèle, vérifiez que tous les ressorts, vis et autres pièces sont bien en place et bien fixées. Pour ce faire, secouez l'unité et assurez-vous qu'aucun bruit suspect ne se produit. Des pièces métalliques ou des copeaux de métal pourraient causer un court-circuit.

DANGER

Certaines batteries de secours contiennent du nickel et du cadmium. Ne les démontez pas, ne les rechargez pas, ne les exposez ni au feu ni à l'eau. Ne les mettez pas en court-circuit. Pour les mettre au rebut, conformez-vous à la réglementation en vigueur. Lorsque vous remplacez la pile de sauvegarde ou celle de l'horloge temps réel, veillez à n'utiliser que les modèles cités dans la liste de pièces détachées adéquate. Une batterie ou une pile inappropriée risque de prendre feu ou d'exploser.

DANGER

La batterie contient du nickel. Ne la démontez pas, ne l'exposez ni au feu ni à l'eau. Ne la mettez pas en court-circuit. Pour la mettre au rebut, conformez-vous à la réglementation en vigueur. Lorsque vous remplacez la batterie, veillez à n'utiliser que les modèles cités dans la liste de pièces détachées adéquate. En effet, une batterie inappropriée risque de prendre feu ou d'exploser.

DANGER

La pile de sauvegarde contient du lithium. Elle présente des risques d'incendie, d'explosion ou de brûlures graves. Ne la rechargez pas, ne retirez pas son connecteur polarisé et ne la démontez pas. Ne l'exposez pas à une temperature supérieure à 100°C, ne la faites pas brûler et n'en exposez pas le contenu à l'eau. Mettez la pile au rebut conformément à la réglementation en vigueur. Une pile inappropriée risque de prendre feu ou d'exploser.

DANGER

Si le panneau d'affichage à cristaux liquides se brise et que vous recevez dans les yeux ou sur les mains une partie du fluide, rincez-les abondamment pendant au moins quinze minutes. Consultez un médecin si des symptômes persistent après le lavage.

DANGER

Afin d’éviter tout risque de choc électrique, ne retirez pas le cache en plastique protégeant la partie inférieure de la carte d’alimentation.

DANGER

Bien que le voltage des batteries principales soit peu élevé, le court-circuit ou la mise à la masse d’une batterie peut produire suffisamment de courant pour brûler des matériaux combustibles ou causer des brûlures corporelles graves.

DANGER

Si le remplacement à chaud n’est pas autorisé pour l’unité remplaçable sur site que vous remplacez, procédez comme suit avant de retirer l’unité : mettez l’ordinateur hors tension, débranchez tous les cordons d’alimentation des prises de courant, retirez le bloc de batterie et déconnectez tous les câbles d’interconnexion.

VORSICHT

Bevor nach einem FRU-Austausch der Computer wieder angeschlossen wird, muß sichergestellt werden, daß keine Schrauben, Federn oder andere Kleinteile fehlen oder im Gehäuse vergessen wurden. Der Computer muß geschüttelt und auf Klappergeräusche geprüft werden. Metallteile oder-splitter können Kurzschlüsse erzeugen.

VORSICHT

Die Bereitschaftsbatterie, die sich unter dem Diskettenlaufwerk befindet, kann geringe Mengen Nickel und Cadmium enthalten. Sie darf nur durch die Verkaufsstelle oder den IBM Kundendienst ausgetauscht werden. Sie darf nicht zerlegt, wiederaufgeladen, kurzgeschlossen, oder Feuer oder Wasser ausgesetzt werden. Die Batterie kann schwere Verbrennungen oder Verätzungen verursachen. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Bereitschafts-oder Systembatterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

VORSICHT

Akkus enthalten geringe Mengen von Nickel. Sie dürfen nicht zerlegt, wiederaufgeladen, kurzgeschlossen, oder Feuer oder Wasser ausgesetzt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Batterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

VORSICHT

Die Systembatterie ist eine Lithiumbatterie. Sie kann sich entzünden, explodieren oder schwere Verbrennungen hervorrufen. Batterien dieses Typs dürfen nicht aufgeladen, zerlegt, über 100 C erhitzt oder verbrannt werden. Auch darf ihr Inhalt nicht mit Wasser in Verbindung gebracht oder der zur richtigen Polung angebrachte Verbindungsstecker entfernt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Batterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

VORSICHT

Die Leuchtstoffröhre im LCD-Bildschirm enthält Quecksilber. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Der LCD-Bildschirm besteht aus Glas und kann zerbrechen, wenn er unsachgemäß behandelt wird oder der Computer auf den Boden fällt. Wenn der Bildschirm beschädigt ist und die darin befindliche Flüssigkeit in Kontakt mit Haut und Augen gerät, sollten die betroffenen Stellen mindestens 15 Minuten mit Wasser abgespült und bei Beschwerden anschließend ein Arzt aufgesucht werden.

VORSICHT

Aus Sicherheitsgründen die Kunststoffabdeckung, die den unteren Teil der Spannungswandlerplatine umgibt, nicht entfernen.

VORSICHT

Obwohl Hauptbatterien eine niedrige Spannung haben, können sie doch bei Kurzschluß oder Erdung genug Strom abgeben, um brennbare Materialien zu entzünden oder Verletzungen bei Personen hervorzurufen.

VORSICHT

Wenn ein Austausch der FRU bei laufendem Betrieb nicht erlaubt ist, gehen Sie beim Austausch der FRU wie folgt vor: Schalten Sie den Computer aus, ziehen Sie alle Netzkabel von den Netzsteckdosen ab, entfernen Sie den Akku und ziehen Sie alle miteinander verbundenen Kabel ab.

סכנה

לפני הפעלת המחשב לאחר החלפת FRU יש לוודא שכל הברגים, הקפיצים, וחלקים קטנים אחרים נמצאים במקומם ואינם חופשיים לזוז בתוך המחשב. כדי לוודא זאת, יש לטלטל את המחשב ולהקשיב לגילוי קולות שקשוק. חלקי או שבבי מתכת עלולים לגרום לקצרים חשמליים.

סכנה

סוללות המתנה מסוימות מכילות כמות קטנה של ניקל וקדמיום. אין לפרק סוללת המתנה, לטעון אותה מחדש, להשליך אותה לאש או למים או לקצר אותה. יש לסלק את הסוללה כנדרש על ידי התקנות והחוקים המקומיים. יש להשתמש רק בסוללה המופיעה ברשימת החלקים המתאימה. שימוש בסוללה לא מתאימה עלול לגרום להצתה או התפוצצות של הסוללה.

סכנה

מארז הסוללה מכיל כמות קטנה של ניקל וקדמיום. אין לפרק את מארז הסוללה, להשליך אותו לאש או למים או לקצר אותו. יש לסלק את מארז הסוללה הסוללה כנדרש על ידי התקנות והחוקים המקומיים. יש להשתמש רק בסוללה המופיעה ברשימת החלקים המתאימה בזמן החלפת מארז הסוללה. שימוש בסוללה לא מתאימה עלול לגרום להצתה או התפוצצות של הסוללה.

סכנה

סוללת הליתיום עלולה לגרום לשריפה, להתפוצצות או לכוויות קשות. אין לטעון אותה מחדש, לסלק את המחבר המקוטב שלה, לפרק אותה או לחמם אותה לטמפרטורה העולה על 100 מעלות צלזיוס. אין לשרוף את הסוללה ואין לחשוף את תוכן התא למים. יש לסלק את הסוללה כנדרש בתקנות ובחוקים המקומיים. יש להשתמש רק בסוללה המופיעה ברשימת החלקים המתאימים. שימוש בסוללה אחרת עלול לגרום לסכנת שריפה או התפוצצות.

סכנה

אם מסך הגביש הנוזלי (LCD) נשבר והנוזל מתוך המסך בא במגע עם עיניכם או ידיכם, שטפו את האזורים הנגועים מיד במים במשך 15 דקות לפחות. פנו לקבלת עזרה רפואית אם תסמינים הנובעים מהמגע עם הנוזל נמשכים לאחר השטיפה.

סכנה

כדי למנוע התחשמלות, אין להסיר את מכסה הפלסטיק המגן על חלקו התחתון של הכרטיס ההפוך.

סכנה

אף שהסוללות הראשיות הן בעלות מתח נמוך, סוללה מקוצרת או מוארקת עלולה להפיק זרם מספיק לגרימת כוויות או להצתת חומרים דליקים.

סכנה

אלא אם כן מותרת 'החלפה חמה' של ה-FRU המוחלף, פעלו כדלהלן לפני הסרתו : כבו את המחשב, נתקו את כל כבלי החשמל מהשקעים, הוציאו את מארז הסוללות ונתקו את כל הכבלים המחוברים.

危険

FRU の交換後、 ThinkPad の電源を入れる前に、ねじ、バネ、その他の小さな部品がすべて正しい位置にあり、また ThinkPad の内部で緩んでいないことを確認してください。
これを確認するには、 ThinkPad を振って、カチャカチャと音がしないか確かめます。金属部品や金属破片はショートの原因になることがあります。

危険

予備バッテリーの中には少量のニッケルとカドミウムが含まれているものがあります。したがって、予備バッテリーの分解、再充電、火または水の中への投棄、またはショートさせることは決して行わないでください。バッテリーを廃棄する場合は地方自治体の条例に従ってください。適切なパーツ・リストにあるバッテリーだけを使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

危険

バッテリー・パックには少量のニッケルが含まれています。バッテリー・パックを分解したり、火または水の中に投げ込んだり、ショートさせないでください。バッテリー・パックの廃棄にあたっては、地方自治体の条例または規則に従ってください。バッテリー・パックを交換するときは、適切なパーツ・リストにあるバッテリーだけを使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

危険

リチウム・バッテリーは、火災、爆発、または重症のやけどを引き起こすことがあります。バックアップ・バッテリーの充電、その極性コネクターの取り外し、バッテリー本体の分解、
100 ℃ (212 ° F) 以上への加熱、焼却、電池の中身を水に浸すことはしないでください。バッテリーを廃棄する場合は地方自治体の条例に従ってください。適切なパーツ・リストにあるバッテリーだけを使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

危険

LCD が破損し、 LCD の中の液体が目に入ったり、手に触れたりした場合は、液体が触れた部分を少なくとも 15 分間洗い流してください。洗い流した後に、液体によって何らかの症状が現れた場合は、医師の治療を受けてください。

危険

感電を防ぐため、インバーター・カードの下部を保護しているプラスチック・カバーを外さないでください。

危険

メイン・バッテリーの電圧は低くても、ショートしたり、接地したバッテリーが、作業者にやけどを負わせたり、可燃物を燃やすだけの電流を発生させる場合があります。

危険

交換しようとしている FRU がホット・スワップに対応していない場合、それを取り外す前に、コンピューターの電源をオフにし、すべての電源コードをコンセントから抜き、バッテリー・パックを取り外して、相互接続しているケーブルをすべて切り離してください。

위험

FRU를 교체하고 나서 컴퓨터 전원을 켜기 전에 모든 나사, 스프링 및 기타 작은 부품들이 올바른 위치에 있는지, 컴퓨터 내부에 단단하게 연결되어 있는지 확인하십시오. 컴퓨터를 흔들어 달깍거리는 소리가 나지 않는지 확인하십시오. 금속 부품 또는 금속 조각은 누전을 일으킬 수 있습니다.

위험

일부 보조 배터리에는 소량의 니켈 및 카트뮴이 포함되어 있습니다. 보조 배터리를 분해하거나, 다시 충전하거나, 불 또는 물에 던지거나, 단락시키지 마십시오. 배터리 팩을 폐기할 때에는 해당 지역의 법률 규정을 따르십시오. 배터리 팩을 교체할 때에는 올바른 배터리만 사용하십시오. 올바르지 않은 배터리를 사용하면 배터리가 발화되거나 폭발할 수 있습니다.

위험

배터리 팩에는 소량의 니켈이 포함되어 있습니다. 배터리 팩을 분해하거나, 불 또는 물에 던지거나, 단락시키지 마십시오. 배터리 팩을 폐기할 때에는 해당 지역의 법률 규정을 따르십시오. 배터리 팩을 교체할 때에는 올바른 배터리만 사용하십시오. 올바르지 않은 배터리를 사용하면 배터리가 발화되거나 폭발할 수 있습니다.

위험

리튬 배터리는 화재, 폭발 또는 심각한 화상을 일으킬 수 있습니다. 리튬 배터리를 다시 충전하거나, 극성 커넥터를 제거하거나, 분해하거나, 100C(212F) 이상으로 가열하거나, 소각하거나, 전지 내용물을 물에 노출시키지 마십시오. 배터리를 폐기할 때에는 해당 지역을 법률 규정을 따르십시오. 올바른 배터리만 사용하십시오. 올바르지 않은 배터리를 사용하면 배터리가 발화되거나 폭발할 수 있습니다.

위험

LCD가 파손되어 LCD 내부의 액체가 눈에 들어가거나 손에 묻으면 즉시 깨끗한 물로 15분 이상 닦아 내십시오. 씻은 후에 조금이라도 이상을 느끼면 즉시 병원에 가서 의사의 진찰을 받아야 합니다.

위험

전기적 위험을 방지하려면 인버터 카드의 아래 부분을 보호하는 플라스틱 덮개를 제거하지 마십시오.

위험

기본 배터리의 전압은 낮지만, 단락되거나 접지된 배터리는 화상을 입히기에 충분한 전류와 가연성 물질을 발생시킬 수 있습니다.

위험

FRU 교체 시 Hot Swap이 지원되지 않는 경우, FRU를 제거하기 전에 컴퓨터의 전원을 끄고, 전기 콘센트에서 전원 코드를 분리하고, 배터리를 제거한 후, 연결된 모든 케이블을 분리하십시오.

PELIGRO

Antes de encender el sistema despues de sustituir una FRU, compruebe que todos los tornillos, muelles y demás piezas pequeñas se encuentran en su sitio y no se encuentran sueltas dentro del sistema. Compruébelo agitando el sistema y escuchando los posibles ruidos que provocarían. Las piezas metálicas pueden causar cortocircuitos eléctricos.

PELIGRO

Algunas baterías de reserva contienen una pequeña cantidad de níquel y cadmio. No las desmonte, ni recargue, ni las eche al fuego o al agua ni las cortocircuite. Deséchelas tal como dispone la normativa local. Utilice sólo baterías que se encuentren en la lista de piezas. La utilización de una batería no apropiada puede provocar la ignición o explosión de la misma.

PELIGRO

Las baterías contienen pequeñas cantidades de níquel. No las desmonte, ni recargue, ni las eche al fuego o al agua ni las cortocircuite. Deséchelas tal como dispone la normativa local. Utilice sólo baterías que se encuentren en la lista de piezas al sustituir la batería. La utilización de una batería no apropiada puede provocar la ignición o explosión de la misma.

PELIGRO

La batería de repuesto es una batería de litio y puede provocar incendios, explosiones o quemaduras graves. No la recargue, ni quite el conector polarizado, ni la desmonte, ni caliente por encima de los 100°C (212°F), ni la incinere ni exponga el contenido de sus celdas al agua. Deséchela tal como dispone la normativa local.

PELIGRO

Si la LCD se rompe y el fluido de su interior entra en contacto con sus ojos o sus manos, lave inmediatamente las áreas afectadas con agua durante 15 minutos como mínimo. Obtenga atención medica si se presenta algún síntoma del fluido despues de lavarse.

PELIGRO

Para evitar descargas, no quite la cubierta de plástico que rodea la parte baja de la tarjeta invertida.

PELIGRO

Aunque las baterías principales tienen un voltaje bajo, una batería cortocircuitada o con contacto a tierra puede producir la corriente suficiente como para quemar material combustible o provocar quemaduras en el personal.

PELIGRO

Salvo que se permita el intercambio en caliente para la unidad sustituible localmente, realice lo siguiente antes de extraerla: apague el sistema, desconecte todos los cables de alimentación de las tomas de alimentación eléctrica, extraiga la batería y desconecte los cables de interconexión.

危險

完成 FRU 更換之後，在開啟電腦的電源之前，請確定所有螺絲、彈簧及其他小零件都已歸位，沒有遺留在電腦內部。
若要確認這一點，請搖晃電腦，聽聽看是否有卡嗒的聲響。
金屬零件或儀錶的火花會造成電線短路。

危險

部分備用電池含有微量的鎳和鎘。請勿拆開備用電池、再充電、丟入火或水中，或使其形成短路。請按照當地法令或規定來棄置電池。

僅限使用零件清單中的電池。使用不適當的電池會導致電池起火或爆炸。

危險

電池套件含有微量的鎳。請勿拆開電池套件、丟入火或水中，或使其形成短路。請按照當地法令或規定來棄置電池套件。

更換電池套件時，僅限使用零件清單中的電池。使用不適當的電池會導致電池起火或爆炸。

危險

鋰電池會導致起火、爆炸或嚴重燒傷。請勿再充電、拔除其電極接頭、拆開、加熱超過 **100°C (212°F)** 、焚燒，或讓電池組成物浸到水。請按照當地法令或規定來棄置電池。
僅限使用零件清單中的電池。使用不適當的電池會導致電池起火或爆炸。

危險

如果 LCD 破裂導致 LCD 流出的液體沾到您的眼睛或手，請立即以清水沖洗沾染部位至少 15 分鐘。如果在清洗後出現該液體所造成的任何症狀，請就醫治療。

危險

為避免電擊，請勿拆下轉換卡下面的塑膠護蓋。

危險

雖然主電池的電壓很低，但短路或接地電池所產生的電流，仍足以使人燒傷或
使可燃物質起火。

危險

除非 FRU 允許以熱抽換來替換，否則請依下列方式將其移除：將電腦關機，拔除插
座上所有電源線，移除電池包，並拔開任何交互連接的線材。

Laser compliance statement (multilingual translations)

The laser compliance statements in this section are provided in the following languages:

- English
- Arabic
- Brazilian Portuguese
- French
- German
- Hebrew
- Japanese
- Korean
- Spanish
- Traditional Chinese

Some models of ThinkPad Notebook are equipped from the factory with an optical storage device such as a CD-ROM drive or a DVD-ROM drive. Such devices are also sold separately as options. If one of these drives is installed, it is certified in the U.S. to conform to the requirements of the Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J for Class 1 laser products. Elsewhere, the drive is certified to conform to the requirements of the International Electrotechnical Commission (IEC) 60825-1 and CENELEC EN 60825-1 for Class 1 laser products.

If a CD-ROM drive, a DVD-ROM drive, or another laser device is installed, note the following:

CAUTION:
Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.

Opening the CD-ROM drive, the DVD-ROM drive, or any other optical storage device could result in exposure to hazardous laser radiation. There are no serviceable parts inside those drives. **Do not open.**

A CD-ROM drive, a DVD-ROM drive, or any other storage device installed may contain an embedded Class 3A or Class 3B laser diode. Note the following:

DANGER

Emits visible and invisible laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

بعض طرازات حاسب ThinkPad تكون مجهزة من المصنع بأجهزة تخزين ضوئية مثل أقراص تشغيل CD-ROM أو DVD-ROM. ويتم أيضا بيع مثل تلك الأجهزة كاختيارات منفصلة. في حالة تركيب واحد من أقراص التشغيل هذه، فيتم اعتمادها في الولايات المتحدة لتتوافق مع متطلبات Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J لمنتجات الليزر من الفئة ١. في مكان آخر، يتم اعتماد قرص التشغيل ليتوافق مع متطلبات International Electrotechnical Commission (IEC) 60825-1 و CENELEC EN 60825-1 لمنتجات الليزر من الفئة ١.

في حالة تركيب أقراص تشغيل CD-ROM أو DVD-ROM أو أي جهاز ليزر آخر، لاحظ ما يلي:

تحذير:

قد ينتج عن استخدام مفاتيح أو تنفيذ عمليات ضبط أو اجراءات بطريقة مختلفة عما هو محدد هنا التعرض لأشعة ليزر في منتهى الخطورة.

قد ينتج عن فتح أقراص تشغيل CD-ROM أو DVD-ROM أو أي جهاز تخزين ضوئي آخر التعرض لأشعة ليزر في منتهى الخطورة. لا توجد أجزاء يمكن صيانتها داخل أقراص التشغيل. **لا تقم بفتحها.**

قد تحتوي أقراص تشغيل CD-ROM أو DVD-ROM أو أي أجهزة تخزين أخرى تم تركيبها على Embedded Class 3A أو Class 3B Laser Diode. لاحظ ما يلي:

خطر

تصدر أشعة ليزر مرئية وغير مرئية عند الفتح. لا تحدق في اللشعاع ولا تنظر بطريقة مباشرة باستخدام أدوات ضوئية وتجنب التعرض المباشر للشعاع.

Alguns modelos de computador ThinkPad são equipados na fábrica com um dispositivo de armazenamento ótico, como uma unidade de CD-ROM ou de DVD-ROM. Tais dispositivos também são vendidos separadamente como opcionais. Se uma dessas unidades estiver instalada, ela é certificada nos Estados Unidos em conformidade com os requisitos do Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR), Subcapítulo J, para produtos a laser da Classe 1. Em outros países, a unidade é certificada em conformidade com os requisitos da International Electrotechnical Commission (IEC) 60825-1 e CENELEC EN 60825-1 para produtos a laser da Classe 1.

Se uma unidade de CD-ROM, uma unidade de DVD-ROM, ou outro dispositivo de laser estiver instalado, observe o seguinte:

CUIDADO:
O uso de controles, ou ajustes, ou a execução de procedimentos diferentes dos especificados nesta documentação pode resultar em exposição perigosa à radiação.

Abrir a unidade de CD-ROM, a unidade de DVD-ROM, ou qualquer outro dispositivo de armazenamento ótico pode resultar em exposição perigosa à radiação de laser. Não há peças que permitam manutenção dentro dessas unidades. **Não abra.**

Uma unidade de CD-ROM, uma unidade de DVD-ROM, ou qualquer outro dispositivo de armazenamento instalado pode conter um diodo de laser da Classe 3A ou Classe 3B integrado. Observe o seguinte:

PERIGO

Emite radiação de laser visível e invisível quando aberto. Não olhe diretamente para o feixe a olho nu ou com instrumentos óticos, e evite exposição direta ao feixe.

Certains modèles d'ordinateur ThinkPad sont équipés d'origine d'une unité de stockage optique telle qu'une unité de CD-ROM ou de DVD-ROM. Ces unités sont également vendues séparément en tant qu'options. Si l'une de ces unités est installée, elle est certifiée conforme, aux Etats-Unis, aux normes indiquées dans le sous-chapitre J du DHHS 21 CFR relatif aux produits à laser de classe 1. Dans les autres pays, l'unité est certifiée être un produit à laser de classe 1 conforme aux normes CEI 60825-1 et CENELEC EN 60825-1.

Si une unité de CD-ROM, une unité de DVD-ROM ou une unité à laser d'un autre type est installée, veuillez tenir compte des informations suivantes :

ATTENTION :
Pour éviter tout risque d'exposition au rayon laser, respectez les consignes de réglage et d'utilisation des commandes, ainsi que les procédures décrites dans le présent manuel.

L'ouverture de l'unité de CD-ROM, de l'unité de DVD-ROM ou de toute autre unité de stockage optique peut entraîner une exposition à des radiations dangereuses. Aucune pièce de ces unités n'est réparable. **Ne pas ouvrir.**

Une unité de CD-ROM ou de DVD-ROM, ou toute autre unité de stockage optique peut contenir une diode à laser de classe 3A ou 3B. Veuillez tenir compte des informations suivantes :

DANGER

Emet un rayonnement laser visible et invisible lorsque l'unité est ouverte. Evitez toute exposition directe au rayon laser. Evitez de regarder fixement le faisceau ou de l'observer à l'aide d'instruments optiques.

Einige ThinkPad-Modelle sind werkseitig mit einem CD-ROM- oder DVD-ROM-Laufwerk ausgestattet. CD- und DVD-Laufwerke können auch gesondert als Zusatzeinrichtung erworben werden. Die Laufwerke erfüllen die Anforderungen gemäß IEC 60825-1 (International Electrotechnical Commission) und gemäß CENELEC EN 60825-1 für Laserprodukte der Klasse 1.

Bei der Installation von CD-ROM-Laufwerken, DVD-ROM-Laufwerken oder anderen Lasereinheiten Folgendes beachten:

VORSICHT:
Die Bedienung des Geräts auf eine andere als die hier beschriebene Weise oder die Nichteinhaltung der hier beschriebenen Einstellungen oder Bedienschritte kann zur Freisetzung gefährlicher Laserstrahlung führen.

Beim Öffnen eines CD-ROM-Laufwerks, DVD-ROM-Laufwerks oder anderen optischen Speicherlaufwerks können gefährliche Laserstrahlungen freigesetzt werden. Die Laufwerke enthalten keine zu wartenden Teile. **Laufwerke nicht öffnen!**

Ein installiertes CD-ROM-Laufwerk, DVD-ROM-Laufwerk oder anderes optisches Speicherlaufwerk kann eine Laserdiode der Klasse 3A oder 3B enthalten. Folgendes beachten:

GEFAHR

Sichtbare und nicht sichtbare Laserstrahlung, wenn geöfnet. Nicht in den Strahl blicken. Keine Lupen oder Spiegel verwenden. Strahlungsbereich meiden.

חלק מדגמי המחשב של ThinkPad מגיעים מהמפעל כשהם מצוידים בהתקן אחסון אופטי כגון כונן תקליטורים או כונן DVD. התקנים כגון אלה נמכרים גם בנפרד כתוספות. אם מותקן אחד מהכוננים הללו, הוא תואם לדרישות קוד 21 של משרד הבריאות האמריקאי בתקנות הפדרליות האמריקאיות (DHHS 21 CFR), תת-פרק J, בנוגע למוצרי לייזר Class 1. במקומות אחרים, כונן זה תואם לדרישות 60825-1 ו-CENELEC EN 60825-1 עבור מוצרי לייזר Class 1 של הוועדה הבין-לאומית לחשמל (IEC).

אם כונן תקליטורים, כונן DVD או התקן לייזר אחר מותקן, שימו לב להערות הבאות:

זהירות:
שימוש בבקרות ובהתאמות שלא צוינו או ביצוע תהליכים שלא צוינו, יכולים לגרום לחשיפה מסוכנת לקרינה.

פתיחת כונן התקליטורים, כונן ה-DVD או כל התקן אחסון אופטי אחר עשוי לגרום לחשיפה לקרינת לייזר מסוכנת. כוננים אלה אינם כוללים רכיבים להחלפה עצמית. **לא לפתוח**.

כונן תקליטורים, כונן DVD או כל התקן אחסון אחר מותקן יכול להכיל דיודת לייזר מובנית Class 3A או Class 3B. שימו לב:

סכנה

קיימת פליטת קרינת לייזר נראית ובלתי נראית כאשר המוצר פתוח. אל תביטו ישירות אל הקרן, אל תביטו אל הקרן ישירות דרך אמצעים אופטיים, והימנעו מחשיפה ישירה לקרן.

ThinkPad の一部のモデルには、工場出荷時から CD-ROM ドライブまたは DVD-ROM ドライブなどの光学式デバイスが装備されています。これらのデバイスはオプションとして別途購入することもできます。このようなドライブが取り付けられている場合は、該当のドライブは、米国保健社会福祉省の連邦規則集 21 条 (DHHS 21 CFR) の副章 J のクラス 1 レーザー製品の要件に準拠しています。その他の国においては、該当のドライブは、国際電気標準会議 (IEC) 60825-1 および CENELEC EN 60825-1 のクラス 1 レーザー製品の要件に準拠しています。

CD-ROM ドライブ、DVD-ROM ドライブ、または他のレーザー・デバイスが取り付けられている場合は、次のことに注意してください。

注意:

本書で指定された内容以外の、お客様による整備、調整、または手順を行った場合、レーザー放射の危険があります。

CD-ROM ドライブ、DVD-ROM ドライブ、または他の光学式デバイスを開けると、レーザー放射の危険があります。これらのドライブの内部には保守が可能な部品はありません。**開けないようにしてください。**

取り付けられている CD-ROM ドライブ、DVD-ROM ドライブ、または他のデバイスには、クラス 3A またはクラス 3B のレーザー・ダイオードが組み込まれていることがあります。次のことに注意してください。

危険

開けるとレーザー光が放射されます。光線を見つめたり、光学機械を使って直接見たり、光線を直接浴びることは避けてください。

ThinkPad 컴퓨터 일부 모델에는 출고 시 CD-ROM 드라이브 또는 DVD-ROM 드라이브와 같은 광 저장 장치가 설치되어 있습니다. 이러한 장치는 옵션 품목으로 개별적으로 구입할 수도 있습니다. 이러한 드라이브 중 하나가 설치되어 있는 경우, 이는 미국 DHHS 21 CFR(Department of Health and Human Services 21 Code of Federal Regulations)의 클래스 1 레이저 제품에 관한 Subchapter J 규정을 준수하고 있습니다. 기타 지역에서는 클래스 1 레이저 제품에 관한 IEC(International Electrotechnical Commission) 60825-1 및 CENELEC EN 60825-1 규정을 준수하고 있 습니다.

CD-ROM 드라이브, DVD-ROM 드라이브 또는 기타 다른 레이저 장치가 설치되어 있는 경우, 다음을 주의하십시오.

주의:

본 내용에서 설명한 이외의 방법으로 드라이브를 조정하거나 제어 또는 작동하는 경우, 해로운 레이저 복사에 노출될 수 있습니다.

CD-ROM 드라이브, DVD-ROM 드라이브 또는 기타 광 저장 장치를 열면 해로운 레이저 복사에 노출될 수 있습니다. 이러한 드라이브의 내부에는 사용자가 수리할 수 있는 부품이 없습니다. **열지 마십시오.**

설치된 CD-ROM 드라이브, DVD-ROM 드라이브 또는 기타 저장 장치에는 임베디드 클래스 3A 또는 클래스 3B 레이저 다이오드가 포함되어 있을 수 있습니다. 다음을 주의하십시오.

위험

드라이브가 열리면 가시 또는 비가시 레이저 복사 에너지가 방출됩니다. 눈에 광선을 직접 쏘이지 않도록 주의하십시오. 나안 또는 광학 기구를 착용한 상태에서 광선을 직접 바라보지 않도록 하십시오.

Algunos modelos de sistemas ThinkPad están equipados de fábrica con un dispositivo de almacenamiento óptico, como una unidad de CD-ROM o de DVD-ROM. Estas unidades también se venden por separado como opciones. Si está instalada alguna de dichas unidades, se certifica que en los Estados Unidos cumple los requisitos del Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J para productos láser de Clase 1. En otros países, se certifica que cumple los requisitos para productos láser de Clase 1 de las normativas 60825-1 y CENELEC EN 60825-1 de International Electrotechnical Commission (IEC).

Si está instalada alguna unidad de CD-ROM, DVD-ROM u otro dispositivo láser, tenga en cuenta lo siguiente:

PRECAUCIÓN:
La utilización de controles, ajustes o la realización de procedimientos diferentes a los especificados puede dar como resultado una exposición peligrosa a radiaciones.

Si abre la unidad de CD-ROM, DVD-ROM o cualquier otro dispositivo de almacenamiento óptico, podría quedar expuesto a una radiación láser peligrosa. No hay piezas que requieran servicio dentro de estas unidades. **No las abra.**

Las unidades de CD-ROM, DVD-ROM u otro dispositivo de almacenamiento instalado pueden contener un diodo láser de Clase 3A o Clase 3B incorporado. Tenga en cuenta lo siguiente:

PELIGRO

Emite radiación láser visible e invisible cuando está abierto. No fije la vista en el rayo, no lo mire directamente con instrumentos ópticos y evite la exposición directa al rayo.

部分 ThinkPad 電腦機型出廠時已裝配光學儲存裝置，例如 CD-ROM 光碟機或 DVD-ROM 光碟機。這些裝置也另以選用配備的形式出售。如果已安裝其中一台光碟機，則此光碟機已符合「美國健康與人類服務部 (Department of Health and Human Services) 」所公布的 21 Code of Federal Regulations (DHHS 21 CFR) 中 J 小節對於 Class 1 雷射產品的相關規定。在其他國家或地區，這台光碟機符合「國際電子技術委員會 (IEC) 」 60825-1 及 CENELEC EN 60825-1 的 Class 1 雷射產品相關規定。

如果已安裝 CD-ROM 光碟機、 DVD-ROM 光碟機或其他雷射裝置，請注意下列聲明：

警告：
若不遵守本文規定的控制、調整或操作程序，可能會導致危險的輻射外洩。

打開 CD-ROM 光碟機、 DVD-ROM 光碟機或其他任何光學儲存裝置，可能會導致危險的輻射外洩。這些光碟機內部沒有可維修的零件。**請勿打開**。

CD-ROM 光碟機、 DVD-ROM 光碟機或其他任何已安裝的儲存裝置，可能含有內嵌式 Class 3A 或 Class 3B 雷射二極體。這類光碟機的使用者應注意下列聲明：

危險

在開啟光碟機時會發出可見的和無形的雷射輻射。請勿直視光束或以光學儀器直接觀看光束，並避免直接暴露在光束中。

Important service information

This chapter presents following important service information that applies to all machine types supported by this manual:

- "Strategy for replacing FRUs"
  - "Strategy for replacing a hard disk drive" on page 40
  - "Important notice for replacing a system board" on page 40
  - "How to use error message" on page 40
- "Strategy for replacing FRUs for CTO, CMV, and GAV" on page 41
  - "Product definition" on page 41
  - "FRU identification for CTO, CMV, and GAV products" on page 41

Important:
BIOS and device driver fixes are customer-installable. The BIOS and device drivers are posted on the customer support site `http://www.lenovo.com/support`

System Disassembly/Reassembly videos that show the FRU removals or replacements for the Lenovo® authorized service technicians are available in the following support site: `http://www.lenovoservicetraining.com/ion/`

Advise customers to contact the Customer Support Center at 800-426-7378 if they need assistance in obtaining or installing any software fixes, drivers, and BIOS downloads.

Customers in Canada should call the Customer Support Center at 800-565-3344 for assistance or download information.

Strategy for replacing FRUs

Before replacing parts:
Make sure that all software fixes, drivers, and BIOS downloads are installed before replacing any FRUs listed in this manual.

After a system board is replaced, ensure that the latest BIOS is loaded to the system board before completing the service action.

To download software fixes, drivers, and BIOS, do as follows:

1. Go to `http://www.lenovo.com/support`
2. Enter the product number of the computer or press Auto-detect button on the screen.
3. Select **Downloads and drivers**.
4. Follow the directions on the screen and install the necessary software.

Use the following strategy to prevent unnecessary expense for replacing and servicing FRUs:

- **If you are instructed to replace a FRU but the replacement does not correct the problem, reinstall the original FRU before you continue**.
- Some computers have both a processor board and a system board. If you are instructed to replace either the processor board or the system board, and replacing one of them does not correct the problem, reinstall that board, and then replace the other one.
- If an adapter or a device consists of more than one FRU, any of the FRUs may be the cause of the error. Before replacing the adapter or device, remove the FRUs, one by one, to see if the symptoms change. Replace only the FRU that changed the symptoms.

Attention: The setup configuration on the computer you are servicing may have been customized. Running Automatic Configuration may alter the settings. Note the current configuration settings (using the View Configuration option); then, when service has been completed, verify that those settings remain in effect.

Strategy for replacing a hard disk drive

Always try to run a low-level format before replacing a hard disk drive. This will cause all customer data on the hard disk to be lost. Be sure that the customer has a current backup of the data before doing this task.

Attention: The drive startup sequence in the computer you are servicing may have been changed. Be extremely careful during write operations such as copying, saving, or formatting. If you select an incorrect drive, data or programs can be overwritten.

Important notice for replacing a system board

Some components mounted on a system board are very sensitive. Improper handling of a system board can cause damage to those components, and may cause a system malfunction.

Attention: When handling a system board:

- Do not drop a system board or apply any excessive force to it.
- Avoid rough handling of any kind.
- Avoid bending a system board and hard pushing to prevent cracking at each BGA (Ball Grid Array) chipset.

How to use error message

Use the error codes displayed on the screen to diagnose failures. If more than one error code is displayed, begin the diagnosis with the first error code. Whatever causes the first error code may also cause false error codes. If no error code is displayed, see whether the error symptom is listed in the Symptom-to-FRU Index for the computer you are servicing.

Strategy for replacing FRUs for CTO, CMV, and GAV

Product definition

Dynamic Configure To Order (CTO)

This provides the ability for a customer to configure an IBM® or a Lenovo solution from an eSite, and have this configuration sent to fulfillment, where it is built and shipped directly to the customer. The machine label, Product Entitlement Warehouse (PEW), eSupport, and the HMM will load these products as the 4-digit MT and 3-digit model, where model = “CTO” (Example: 1829-CTO).

Custom Model Variant (CMV)

This is a unique configuration that has been negotiated between IBM or Lenovo and the customer. A unique 4-digit MT and 3-digit model is provided to the customer to place orders (Example: 1829-W15). A CMV is a special bid offering. Therefore, it is NOT generally announced.

- The MTM portion of the machine label is the 4-digit MT and 3-digit model, where model = “CTO” (Example: 1829-CTO). The PRODUCT ID portion of the machine label is the 4-digit MT and 3-digit CMV model (Example: 1829-W15).
- The PEW record is the 4-digit MT and 3-digit model, where model = “CTO” (Example: 1829-CTO).
- eSupport will show both the CTO and CMV machine type models (Example: 1829-CTO and 1829-W15 will be found on the eSupport site.)
- The HMM will have the 4-digit MT and 3-digit CTO model only (Example: 1829-CTO). Again, CMVs are custom models and are not found in the HMM.

General Announce Variant (GAV)

This is a standard model (fixed configuration). GAVs are announced and offered to all customers. The MTM portion of the machine label is a 4-digit MT and 3-digit model, where model = a “fixed part number”, not “CTO” (Example: 1829-F1U). Also, PEW, eSupport, and the HMM will list these products under the same fixed model number.

FRU identification for CTO, CMV, and GAV products

There are three information resources to identify which FRUs are used to support CTO, CMV, and GAV products. These sources are PEW, eSupport, and the HMM.

Using PEW

- **PEW** is the primary source for identifying FRU part numbers and FRU descriptions for the key commodities for CTO, CMV and GAV products at a MT - serial number level. An example of key commodities are hard disk drives, system boards, microprocessors, Liquid Crystal Displays (LCDs), and memory.
- Remember, all CTO and CMV products are loaded in PEW under the 4-digit MT and 3-digit model, where model = “CTO” (Example: 1829-CTO). GAVs are loaded in PEW under the 4-digit MT and 3-digit model, where model = a “fixed part number”, not “CTO” (Example: 1829-F1U).
- PEW can be accessed at the following Web site: `http://www.lenovo.com/support/site.wss/document.do?lndocid=LOOK-WARNTY` Select Warranty lookup. Input the MT and the Serial number and the list of key commodities will be returned in the PEW record under COMPONENT INFORMATION.

- **Business Partners** using Eclaim will access PEW when performing Entitlement Lookup. Business Partners will enter Loc ID, MT and Serial, and the key commodities will be returned in the Eclaim record under SYSTEM DETAILS.
- Authorized IBM Business Partners can access Eclaim at the following Web site: `https://wca.eclaim.com`

Using eSupport

For Key Commodities (Examples - hard disk drive, system board, microprocessor, LCD, and memory)

- eSupport can be used to view the list of key commodities built in a particular machine serial (this is the same record found in PEW).
- eSupport can be accessed at the following Web site: `http://www.lenovo.com/support`
- To view the key commodities, click on PARTS INFORMATION, then PARTS LOOKUP. Type in the model type and serial number. The key commodities will be returned in the eSupport record under PARTS SHIPPED WITH YOUR SYSTEM.

For the Remaining FRUs (the complete list of FRUs at the MT Model level)

- eSupport can be used to view the complete list of FRUs for a machine type and model.
- To view the complete list of FRUs, type in the machine type and model (Example: 1829-CTO) under QUICK PATH. Under “View by Document Type” select PARTS INFORMATION. Under “Filter by Category” select SERVICE PARTS. Under “Parts Information by Date” select SYSTEM SERVICE PARTS. The list of service parts by description, with applicable machine type model and FRU will be displayed.

Using the HMM

For Key Commodities (Examples - hard disk drive, system board, microprocessor, LCD, and memory)

Use the HMM as a back-up to PEW and eSupport to view the complete list of FRUs at the MT Model level.

General checkout

This chapter presents following information:

The descriptions in this chapter apply to any ThinkPad model that supports the PC-Doctor® for DOS diagnostics program. Some descriptions might not apply to your particular computer.

Before you go to the checkout guide, be sure to read the following important notes.

Important notes:

- **Only certified trained personnel should service the computer.**
- **Before replacing any FRU, read the entire page on removing and replacing FRUs.**
- **When you replace FRUs, use new nylon-coated screws.**
- **Be extremely careful during such write operations as copying, saving, or formatting.** Drives in the computer that you are servicing sequence might have been altered. If you select an incorrect drive, data or programs might be overwritten.
- **Replace a FRU only with another FRU of the correct model.** When you replace a FRU, make sure that the model of the machine and the FRU part number are correct by referring to the FRU parts list.
- **A FRU should not be replaced because of a single, unreproducible failure.** Single failures can occur for a variety of reasons that have nothing to do with a hardware defect, such as cosmic radiation, electrostatic discharge, or software errors. Consider replacing a FRU only when a problem recurs. If you suspect that a FRU is defective, clear the error log and run the test again. If the error does not recur, do not replace the FRU.
- **Be careful not to replace a nondefective FRU.**

What to do first

When you do return a FRU, you must include the following information in the parts exchange form or parts return form that you attach to it:

__ 1. Name and phone number of service technician
__ 2. Date of service
__ 3. Date on which the machine failed
__ 4. Date of purchase
__ 5. Failure symptoms, error codes appearing on the display, and beep symptoms
__ 6. Procedure index and page number in which the failing FRU was detected
__ 7. Failing FRU name and part number
__ 8. Machine type, model number, and serial number
__ 9. Customer's name and address

Note for warranty: During the warranty period, the customer may be responsible for repair costs if the computer damage was caused by misuse, accident, modification, unsuitable physical or operating environment, or improper maintenance by the customer.

Following is a list of some common items that are not covered under warranty and some symptoms that might indicate that the system was subjected to stress beyond normal use.

Before checking problems with the computer, determine whether the damage is covered under the warranty by referring to the following list:

The following are not covered under warranty:

- LCD panel cracked from the application of excessive force or from being dropped
- Scratched (cosmetic) parts
- Distortion, deformation, or discoloration of the cosmetic parts
- Plastic parts, latches, pins, or connectors that have been cracked or broken by excessive force
- Damage caused by liquid spilled into the system
- Damage caused by the improper insertion of a PC Card or the installation of an incompatible card
- Improper disc insertion or use of an optical drive
- Diskette drive damage caused by pressure on the diskette drive cover, foreign material in the drive, or the insertion of a diskette with multiple labels
- Damaged or bent diskette eject button
- Fuses blown by attachment of a nonsupported device
- Forgotten computer password (making the computer unusable)
- Sticky keys caused by spilling a liquid onto the keyboard
- Use of an incorrect ac adapter on laptop products

The following symptoms might indicate damage caused by nonwarranted activities:

- Missing parts might be a symptom of unauthorized service or modification.
- If the spindle of a hard disk drive becomes noisy, it may have been subjected to excessive force, or dropped.

Checkout guide

Use the following procedures as a guide in identifying and correcting problems with the ThinkPad Notebook.

Note: The diagnostic tests are intended to test only ThinkPad products. The use of non-ThinkPad products, prototype cards, or modified options can lead to false indications of errors and invalid system responses.

1. Identify the failing symptoms in as much detail as possible.
2. Verify the symptoms. Try to re-create the failure by running the diagnostic test or by repeating the operation.

Diagnostics using PC-Doctor for DOS

The ThinkPad Notebook has a test program called PC-Doctor for DOS (hereafter called *PC-Doctor*.) You can detect errors by running the diagnostics test included in PC-Doctor.

> **Note:**
> PC-Doctor for DOS is available at the following Web site: `http://www.lenovo.com/support`
>
> To create the PC-Doctor diagnostic CD, follow the instructions on the Web site.

For some possible configurations of the computer, PC-Doctor might not run correctly. To avoid this problem, you need to initialize the computer setup by use of the BIOS Setup Utility before you run PC-Doctor.

To enter BIOS Setup Utility, do as follows:

1. Turn on the computer.
2. When the ThinkPad logo comes up, immediately press F1 to enter the BIOS Setup Utility.

Note: If a supervisor password has been set by the customer, BIOS Setup Utility menu appears after the password is entered. You can start the utility by pressing Enter instead of entering the supervisor password; however, you cannot change the parameters that are protected by the supervisor password.

On the BIOS Setup Utility screen, press F9, Enter, F10, and then Enter.

Note: When you initialize the computer configuration, some devices are disabled, such as the serial port. If you test one of these devices, you will need to enable it by using Configuration utility for DOS. The utility is available on the following Web site: `http://www.lenovo.com/support`

PC-Doctor cannot be used to test a device that is in the docking station, even if the computer supports the docking station. To test a USB device, connect it to the USB connector of the computer.

Testing the computer

Note: The PC-Doctor diagnostic CD does not support any optical drives connected through USB devices or any others. It supports only the internal optical drive of the ThinkPad Notebook.

To run the test, do as follows:

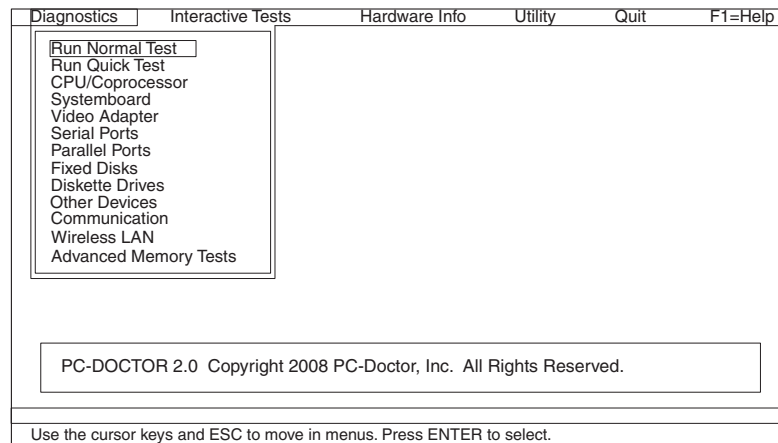
1. Turn off the computer.
2. Make sure that the internal optical drive that is supported as a startup device is attached to the computer.
3. Turn on the computer.

   If the computer cannot be powered on, go to “Power system checkout” on page 52, and check the power sources.

   If an error code appears, go to “Symptom-to-FRU index” on page 62.
4. When the ThinkPad logo comes up, immediately press F12 to enter the Boot Menu.
5. Insert the PC-Doctor CD into the internal optical drive.
6. Press cursor keys to select **ATAPI CDx** (x: 0, 1, ...) and then press Enter.
7. Follow the instructions on the screen.
8. The main panel of PC-Doctor appears.
9. Select **Diagnostics** with the arrow keys, and press Enter.

   Note: You can select an item not only with the arrow keys, but also with the TrackPoint® pointer. Instead of pressing Enter, click the left button.

   A pull-down menu appears. (Its exact form depends on the model.)

   Note: PC-Doctor menu does not mean the formal support device list. Some unsupported device names may appear in the PC-Doctor menu.

The options on the test menu are as follows:

<table>
<tr><th>Diagnostics</th><th>Interactive Tests</th></tr>
<tr><td>• Run Normal Test
• Run Quick Test
• CPU/Coprocessor
• Systemboard
• Video Adapter
• Serial Ports
• Parallel Ports
• Fixed Disks
• Diskette Drives
• Other Devices
• ThinkPad Devices
• Communication
• Wireless LAN
• Advanced Memory Tests</td><td>• Keyboard
• Video
• Internal Speaker
• Mouse
• Diskette
• System Load
• Optical Drive Test
• Intel WLAN Radio Test</td></tr>
<tr><td colspan="2">Notes:
• In the Keyboard test in Interactive Tests, the Fn key should be held down for at least 2 seconds; otherwise, it cannot be sensed.
• Video Adapter test supports only the LCD display on the ThinkPad Notebook. If you have an external monitor attached to your computer, detach it before running PC-Doctor for DOS.
• To test Digital Signature Chip, the security chip must be set to Active.
• To test Serial Ports or Parallel Ports, the ThinkPad Notebook must be attached to the docking station.</td></tr>
</table>

10. Run the applicable function test.
11. Follow the instructions on the screen. If there is a problem, PC-Doctor shows messages describing it.
12. To exit the test, select **Quit — Exit Diag**.

    To cancel the test, press Esc.

Note: After running PC-Doctor, check the time and date on the system and reset them if they are incorrect.

Detecting system information with PC-Doctor

PC-Doctor can detect the following system information:

Hardware Info
- System Configuration
- Memory Contents
- Physical Disk Drives
- Logical Disk Drives
- VGA Information
- IDE Drive Info
- PCI Information
- PNPISA Info
- SMBIOS Info
- VESA LCD Info
- Hardware Events Log

Utility
- Run External Tests
- Surface Scan Hard Disk
- Benchmark System

- DOS Shell
- Tech Support Form
- Battery Rundown
- View Test Log
- Print Log
- Save Log
- Full Erase Hard Drive
- Quick Erase Hard Drive

Lenovo ThinkVantage Toolbox (Lenovo System Toolbox)

Lenovo ThinkVantage® Toolbox (Lenovo System Toolbox in Windows Vista® and Windows® XP) is a diagnostic program that works through the Windows operating system. It enables you to view symptoms of computer problems and solutions for them, and includes automatic notification when action is required, computing assistance, advanced diagnostics, and diagnostic history.

Note:
The latest Lenovo ThinkVantage Toolbox (Lenovo System Toolbox) is available at the following Web site: `http://www.lenovo.com/support`

To install the latest Lenovo ThinkVantage Toolbox (Lenovo System Toolbox) on the computer, follow the instructions on the Web site.

To run this program, do as follows:

Windows 7:
While the Windows operating system is running, press the ThinkVantage button.

You can also run this program as either of the following:
- Click **Start** --> **All Programs** --> **Lenovo ThinkVantage Tools** --> **System Health and Diagnostics**.
- Click **Start** --> **Control Panel** --> **System and Security** --> **Lenovo's System Health and Diagnostics**.

Windows Vista and Windows XP:
Click **Start** --> **All Programs** --> **Lenovo Services** --> **Lenovo System Toolbox**.

Follow the instructions on the screen. Lenovo ThinkVantage Toolbox (Lenovo System Toolbox) also has problem determination aids that determine software and usage problems.

For additional information about this program, see the Help for the program.

PC-Doctor for Windows

In some models of ThinkPad Notebook, PC-Doctor for Windows enables you to troubleshoot and resolve problems related to the computer.

Select one of the categories listed below to display symptoms and solutions:
- Check System Health
- System and Device Tests
- Lenovo Troubleshooting Center

- System Reports
- Updates and Support

PC-Doctor for Rescue and Recovery

In some models of ThinkPad Notebook, the Rescue and Recovery® workspace enables you to run the PC-Doctor program to test the hardware features of the computer.

To run the test, click “Run Diagnostics” on the Rescue and Recovery main screen.

FRU tests

The following table shows the test for each FRU.

Table 1. FRU tests

FRU	Applicable test
System board	1. **Diagnostics** --> **CPU/Coprocessor** 2. **Diagnostics** --> **Systemboard** 3. If the docking station or the port replicator is attached to the ThinkPad computer, detach it. Place the computer on a horizontal surface, and run **Diagnostics** --> **ThinkPad Devices** --> **HDD Active Protection Test**. **Note:** Do not apply any physical shock to the computer while the test is running.
Power	**Diagnostics** --> **ThinkPad Devices** --> **AC Adapter**, **Battery 1 (Battery2)**
LCD unit	1. **Diagnostics** --> **Video Adapter** 2. **Interactive Tests** --> **Video**
Modem daughter card (MDC-3.0)	1. Make sure the modem is set up correctly. 2. Replace the modem jack and the modem card in turn, and run the following tests in **Diagnostics** --> **Communication**: a. Conexant Smart Modem Interrupt b. Conexant Smart Modem Dialtone
Audio	Enter the BIOS Setup Utility and change Serial ATA (SATA) setting to **Compatibility**, and run **Diagnostics** --> **Other Device** --> **Conexant Audio**
Speaker	**Interactive Tests** --> **Internal Speaker** **Note:** Once Modem/Audio test is done, the no sound is heard this test. In this case, turn off and turn on the computer. Then, run this test again.
PC Card slot	**Diagnostics** --> **Systemboard** --> **PCMCIA**
ExpressCard slot	1. Insert a PCI-Express/USB Wrap card into the ExpressCard slot. 2. Turn on the computer. 3. Run **Diagnostics** --> **ThinkPad Devices** --> **ExpressCard slot**.
Keyboard	1. **Diagnostics** --> **Systemboard** --> **Keyboard** 2. **Interactive Tests** --> **Keyboard**
Hard disk drive or solid state drive	Enter the BIOS Setup Utility and change Serial ATA (SATA) setting to **Compatibility**, and run **Diagnostics** --> **Fixed Disks**
	You can also diagnose the hard disk drive without starting up the operating system. To diagnose the hard disk drive from the BIOS Setup Utility, do as follows: 1. Remove any diskette from the diskette drive, and then turn off the computer. 2. Turn on the computer. 3. While the message, "To interrupt normal startup, press the blue ThinkVangate button," is displayed at the lower left of the screen, press F1 to enter the BIOS Setup Utility. 4. Using cursor keys, select **HDD diagnostic program**. Press enter. 5. Using cursor keys, select **Main hard disk drive** or **Ultrabay hard disk drive**. 6. Press Enter to start the diagnostic program.
Diskette drive	1. **Diagnostics** --> **Diskette Drives** 2. **Interactive Tests** --> **Diskette**

Table 1. FRU tests (continued)

FRU	Applicable test
Optical drive	1. **Diagnostics** --> **Other Devices**--> **Optical Drive** 2. **Interactive Tests** --> **Optical Drive Test**
Memory	1. If two DIMMs are installed, remove one of them and run **Diagnostics** --> **Advanced Memory Tests**. 2. If the problem does not recur, return the DIMM to its place, remove the other one, and run the test again.
Fan	1. Turn on the computer and check the air turbulence at the louver near the PC Card slot. 2. Run **Diagnostics** --> **ThinkPad Devices** --> **Fan**.
TrackPoint or pointing device	If the TrackPoint does not work, check the configuration as specified in the BIOS Setup Utility. If the TrackPoint is disabled, select **Automatic** to enable it. After you use the TrackPoint, the pointer may drift on the screen for a short time. This drift can occur when a slight, steady pressure is applied to the TrackPoint pointer. This symptom is not a hardware problem. If the pointer stops after a short time, no service action is necessary. If enabling the TrackPoint does not correct the problem, continue with the following: • **Interactive Tests** --> **Mouse**
Touch Pad	If the Touch Pad does not work, check the configuration as specified in the BIOS Setup Utility. If the Touch Pad is disabled, select **Automatic** to enable it. If enabling the Touch Pad does not correct the problem, continue with the following: • **Interactive Tests** --> **Mouse**

Power system checkout

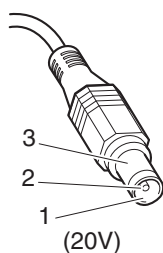
To verify a symptom, do the following:
1. Turn off the computer.
2. Remove the battery pack.
3. Connect the ac adapter.
4. Check that power is supplied when you turn on the computer.
5. Turn off the computer.
6. Disconnect the ac adapter and install the charged battery pack.
7. Check that the battery pack supplies power when you turn on the computer.

If you suspect a power problem, see the appropriate one of the following power supply checkouts:
- "Checking the AC adapter"
- "Checking operational charging" on page 53
- "Checking the battery pack" on page 53
- "Checking the backup battery" on page 54

Checking the AC adapter

You are here because the computer fails only when the AC adapter is used.

- If the power problem occurs only when the docking station or the port replicator is used, replace the docking station or the port replicator.
- If the power-on indicator does not turn on, check the power cord of the AC adapter for correct continuity and installation.
- If the computer does not charge during operation, go to "Checking operational charging" on page 53

To check the AC adapter, do the following:
1. Unplug the AC adapter cable from the computer.
2. Measure the output voltage at the plug of the AC adapter cable. See the following figure:

Pin	Voltage (V dc)
1	+20
2	0
3	Ground

Note: Output voltage of pin no.2 of the AC adapter may different from the one you are servicing.
3. If the voltage is not correct, replace the AC adapter.
4. If the voltage is acceptable, do the following:
   - Replace the system board.
   - If the problem persists, go to "FRU tests" on page 50.

Note: Noise from the AC adapter does not always indicate a defect.

Checking operational charging

To check whether the battery charges properly during operation, use a discharged battery pack or a battery pack that has less than 50% of the total power remaining when installed in the computer.

Perform operational charging. If the battery status indicator or icon does not turn on, remove the battery pack and let it return to room temperature. Reinstall the battery pack. If the charge indicator or icon still does not turn on, replace the battery pack.

If the charge indicator still does not turn on, replace the system board. Then reinstall the battery pack. If it is still not charged, go to the next section.

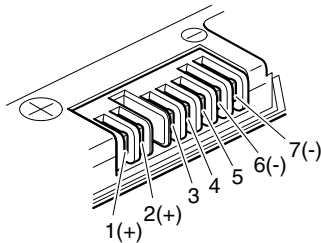
Checking the battery pack

Battery charging does not start until the Power Manager Battery Gauge shows that less than 96% of the total power remains; under this condition the battery pack can charge to 100% of its capacity. This protects the battery pack from being overcharged or from having a shortened life.

To check your battery, move your cursor to the Power Manager Battery Gauge icon in the icon tray of the Windows® taskbar and wait for a moment (but do not click), and the percentage of battery power remaining is displayed. To get detailed information about the battery, double-click the Power Manager Battery Gauge icon.

Note: If the battery pack becomes hot, it may not be able to charge. Remove it from the computer and leave it at room temperature for a while. After it cools down, reinstall and recharge it.

To check the battery pack, do the following:

1. Power off the computer.
2. Remove the battery pack and measure the voltage between battery terminals 1 (+) and 7 (-). See the following figure:

Terminal	Voltage (V dc)
1	+ 0 to + 12.6
7	Ground (-)

3. If the voltage is less than +11.0 V dc, the battery pack has been discharged.

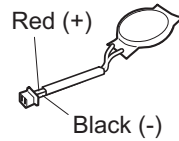
   Note: Recharging will take at least 3 hours, even if the indicator does not turn on.

   If the voltage is still less than +11.0 V dc after recharging, replace the battery.
4. If the voltage is more than +11.0 V dc, measure the resistance between battery terminals 5 and 7. The resistance must be 4 to 30 K Ω.

   If the resistance is not correct, replace the battery pack. If the resistance is correct, replace the system board.

Checking the backup battery

Do the following:

1. Power off the computer, and unplug the ac adapter from it.
2. Turn the computer upside down.
3. Remove the battery pack (see “1010 Battery pack” on page 84).
4. Remove the backup battery (see “1100 Backup battery” on page 100).
5. Measure the voltage of the backup battery. See the following figure.

Wire	Voltage (V dc)
Red	+2.5 to +3.2
Black	Ground

- If the voltage is correct, replace the system board.
- If the voltage is not correct, replace the backup battery.
- If the backup battery discharges quickly after replacement, replace the system board.

Related service information

This chapter presents following information:

Service Web site:
When the latest maintenance diskette and the system program service diskette become available, they will be posted on `http://www.lenovo.com/spm`

Restoring the factory contents by using Product Recovery discs

When the hard disk drive (HDD) or solid state drive (SSD) is replaced because of a failure, no Product Recovery program is on the new drive. In this case, you must use the recovery discs for the computer. Order the recovery discs and the drive at the same time so that you can recover the new drive with the pre-installed software when they arrive. For information on which discs to order, see "Recovery discs" on page 243.

To install the factory contents by using Product Recovery discs, do the following:

Note: Recovery takes several hours. The length of time depends on the method you use. If you use recovery discs, recovery takes at least five hours.

1. Insert the bootable **Start Recovery Disc** into the DVD drive.
2. Select your language and click **Next**.
3. Read the license. If you agree with the terms, select **I accept these terms and conditions** and then click **Next**.
4. Insert the **Operating System Recovery Disc** when prompted and click **Yes** to begin the operating system recovery process.
5. Insert the **Product Recovery Disc** when prompted and click **OK**.
6. If you have a **Supplemental Recovery Disc**, insert it when prompted and click **Yes**. If you do not have a **Supplemental Recovery Disc**, click **No**.

   Note: Not all recovery disc sets come with a **Supplemental Recovery Disc**. If there is a **Supplemental Recovery Disc**, it will be clearly marked as such.
7. When all of the data has been copied from the last disc in the set, a message is displayed prompting you to restart the computer. Remove the disc and then click **Yes**.

   Note: The remainder of the recovery process is fully automated and no action is required by you. The computer will restart into the Windows desktop several times and you might experience periods when no activity is apparent on the screen for several minutes at a time. This is normal.

8. When the recovery process is complete, the Welcome to Microsoft Windows screen is displayed. Follow the instructions on the screen to complete the Windows setup.

Restoring the factory contents by using Recovery Disc Set

When the hard disk drive (HDD) or solid state drive (SSD) is replaced because of a failure, no product recovery program is on the new drive. In this case, you must use the Recovery Disc Set for the computer. Order the Recovery Disc Set and the drive at the same time so that you can recover the new drive with the pre-installed software when they arrive. For information on which discs to order, see “Recovery discs” on page 243.

The recovery disc set consists of the user instructions and the following set of DVDs to restore the computer to the original factory configuration.

Operating System Recovery Disc **(one disc)**
: This disc restores the Microsoft® Windows operating system. Use this disc to start the recovery process.

Applications and Drivers Recovery Disc **(one or more discs)**
: This disc restores the preinstalled applications and drivers on the computer.

Supplemental Recovery Disc
: This disc contains additional content, such as updates to the software that was preinstalled on the computer. Not all recovery disc sets come with a *Supplemental Recovery Disc*.

Notes:

- You must have a DVD drive to use the recovery discs. If you do not have an internal DVD drive, you can use an external USB DVD drive.
- During the recovery process, all data on the drive will be deleted. If possible, copy any important data or personal files that you want to keep onto removable media or a network drive before you start the recovery process.

To restore the computer to the original factory configuration using the recovery disc set, do the following:

> **Note:** Recovery takes several hours. The length of time depends on the method you use. If you use recovery discs, recovery takes at least five hours.

1. Make the CD/DVD drive the first startup device in the startup sequence using the following procedure:
   a. Press and hold down the F1 key, and then turn on the computer. When the logo screen is displayed or if you hear repeating beeps, release the F1 key. The Setup Utility program opens.
   b. Use the arrow keys to select **Startup** → **Boot**.
   c. Select the CD/DVD drive as the **1st Boot Device**.
2. Insert the *Operating System Recovery Disc* into the DVD drive.
3. Press F10 to save the Setup Utility configuration changes. Follow the instructions on the screen to begin the recovery process.
4. Select your language and click **Next**.

5. Read the license. If you agree with the terms and conditions, select **I accept these terms and conditions** and then click **Next**. If you do not agree with the terms and conditions, follow the instructions on the screen.
6. Click **Yes** in the displayed window to begin the operating system recovery process.
7. Insert the *Applications and Drivers Recovery Disc* when prompted and then click **OK** to begin the applications and drivers recovery process.
8. If you have a *Supplemental Recovery Disc*, insert it when prompted and click **Yes**. If you do not have a *Supplemental Recovery Disc*, click **No**.
9. When all of the data has been copied from the last disc in the set and has been processed, remove the disc and restart the computer.

   Note: The rest of the recovery process is fully automated and no action is required by you. The computer will restart into the Microsoft Windows desktop several times and you might experience periods when no activity is apparent on the screen for several minutes at a time. This is normal.
10. When the recovery process is complete, the Set Up Windows screen is displayed. Follow the instructions on the screen to complete the Windows setup.
11. After you have completed the Windows setup, you might want to restore the original startup sequence. Start the Setup Utility program and then press F9 to restore the default settings. Press F10 to save and exit the Setup Utility.

Note: After restoring a drive to the factory default settings, you might need to reinstall some device drivers.

Passwords

As many as three passwords may be needed for any ThinkPad Notebook: the power-on password (POP), the hard-disk password (HDP), and the supervisor password (SVP).

If any of these passwords has been set, a prompt for it appears on the screen whenever the computer is turned on. The computer does not start until the password is entered.

Exception: If only an SVP is installed, the password prompt does not appear when the operating system is booted.

Power-on password

A power-on password (POP) protects the system from being powered on by an unauthorized person. The password must be entered before an operating system can be booted. For how to remove the POP, see “How to remove the power-on password” on page 58.

Hard-disk password

There are two hard-disk passwords (HDPs):
- User HDP—for the user
- Master HDP—for the system administrator, who can use it to get access to the hard disk even if the user has changed the user HDP

Note: There are two modes for the HDP: **User only** and **Master + User**. The **Master + User** mode requires two HDPs; the system administrator enters both in the same operation. The system administrator then provides the user HDP to the system user.

Attention: If the user HDP has been forgotten, check whether a master HDP has been set. If it has, it can be used for access to the hard disk drive. If no master HDP is available, neither Lenovo nor Lenovo authorized service technicians provide any services to reset either the user or the master HDP, or to recover data from the hard disk drive. The hard disk drive can be replaced for a scheduled fee.

For how to remove the POP, see "How to remove the hard-disk password" on page 59.

Supervisor password

A supervisor password (SVP) protects the system information stored in the BIOS Setup Utility. The user must enter the SVP in order to get access to the BIOS Setup Utility and change the system configuration.

Attention: If the SVP has been forgotten and cannot be made available to the service technician, there is no service procedure to reset the password. The system board must be replaced for a scheduled fee.

How to remove the power-on password

To remove a POP that you have forgotten, do the following:

(A) If no SVP has been set:

1. Turn off the computer.
2. Remove the battery pack.

   For how to remove the battery pack, see "1010 Battery pack" on page 84.
3. Remove the backup battery.

   For how to remove the backup battery, see "1100 Backup battery" on page 100.
4. Turn on the computer and wait until the POST ends.

   After the POST ends, the password prompt does not appear. The POP has been removed.
5. Reinstall the backup battery and the battery pack.

(B) If an SVP has been set and is known by the service technician:

1. Turn on the computer.
2. When the ThinkPad logo comes up, immediately press F1 to enter BIOS Setup Utility.

   For models supporting the Passphrase function, press F1 while the POP icon is appearing on the screen; then enter the POP. For the other models, enter the POP.

   Note: To check whether the ThinkPad Notebook you are servicing supports the Passphrase function, enter the BIOS Setup Utility and go to **Security** --> **Password**. If the **Using Passphrase** item is displayed in the menu, this function is available on the ThinkPad Notebook.
3. Select **Security**, using the cursor directional keys to move down the menu.
4. Select **Password**.

5. Select **Power-On Password**.
6. Type the current SVP in the **Enter Current Password** field. then leave the **Enter New Password** field blank, and press Enter twice.
7. In the Changes have been saved window, press Enter.
8. Press F10; then, in the Setup confirmation window, select **Yes**.

How to remove the hard-disk password

Attention: If **User only** mode is selected and the user HDP has been forgotten and cannot be made available to the service technician, neither Lenovo nor Lenovo authorized service technicians provide any services to reset the user HDPs or to recover data from the hard disk drive. The hard disk drive can be replaced for a scheduled fee.

To remove a user HDP that has been forgotten, when the SVP and the master HDP are known, do the following:

1. Turn on the computer.
2. When the ThinkPad logo comes up, immediately press F1 to enter BIOS Setup Utility.

   For models supporting the Passphrase function, press F1 while HDP icon is appearing on the screen; then enter the master HDP. For the other models, enter the master HDP.

   Note: To check whether the ThinkPad Notebook you are servicing supports the Passphrase function, enter the BIOS Setup Utility and go to **Security** --> **Password**. If **Using Passphrase** item is displayed in the menu, this function is available on the ThinkPad Notebook.
3. Select **Security**, using the cursor directional keys to move down the menu.
4. Select **Password**.
5. Select **Hard-disk** ***x*** **password**, where *x* is the letter of the hard disk drive. A pop-up window opens.
6. Select **Master HDP**.
7. Type the current master HDP in the **Enter Current Password** field. then leave the **Enter New Password** field blank, and press Enter twice.
8. Press F10.
9. Select **Yes** in the Setup Configuration window.

   Both user HDP and master HDP will have been removed.

Power management

To reduce power consumption, the computer has three power management modes: screen blank, sleep (standby in Windows XP), and hibernation.

Screen blank mode

If the time set on the "Turn off monitor" timer in the operating system expires, the LCD backlight turns off.

To put the computer into screen blank mode, do as follows:

1. Press Fn+F3. A panel for selecting a power plan (in Windows XP, power scheme) appears.
2. Select **Power off display (keep current power plan)** (in Windows XP, **keep current power scheme**).

You can also put the computer into screen blank mode, press ThinkVantage button and use the ThinkVantage Productivity Center.

Note: If the computer is a Windows 7 model, it does not support ThinkVantage Productivity Center.

To end screen blank mode and resume normal operation, press any key.

Sleep (Standby) mode

When the computer enters sleep (standby) mode, the following events occur in addition to what occurs in screen blank mode:

- The LCD is powered off.
- The hard disk drive is powered off.
- The CPU stops.

To enter sleep (standby) mode, press Fn+F4.

Note: You can change the action of the Fn+F4 key combination by changing the settings in Power Manager.

In certain circumstances, the computer goes into sleep (standby) mode automatically:

- If a "suspend time" has been set on the timer, and the user does not do any operation with the keyboard, the TrackPoint, the hard disk, the parallel connector, or the diskette drive within that time.
- If the battery indicator blinks orange, indicating that the battery power is low.

Note: Even if you do not set the low-battery alarm, the charge indicator notifies you when the battery is low, and then the computer enters the power-saving mode automatically.

To cause the computer to return from sleep (standby) mode and resume operation, do one of the following:

- Press the Fn key.
- Open the LCD cover.
- Turn on the power switch.

Also, in either of the following events, the computer automatically returns from sleep (standby) mode and resumes operation:

- The ring indicator (RI) is signaled by a serial device or a PC Card device.
- The time set on the resume timer elapses.

  Note: The computer does not accept any input immediately after it enters sleep (standby) mode. Wait a few seconds before taking any action to reenter operation mode.

Hibernation mode

In hibernation mode, the following occurs:

- The system status, RAM, VRAM, and setup data are stored on the hard disk.
- The system is powered off.

Note: If the computer enters the hibernation mode while it is docked to the docking station, do not undock it before resuming normal operation. If you do undock it and then try to resume normal operation, you will get an error message, and you will have to restart the system.

To cause the computer to enter hibernation mode, do any of the following:

- Press the Fn+F12 keys.
- If you have defined one of the following actions as the event that causes the system to go into hibernation mode, perform that action.
  – Closing the lid.
  – Pressing the power button.
  – Pressing Fn+F4 keys.

Also, the computer goes into hibernation mode automatically in either of the following conditions:

- If a “hibernation time” has been set on the timer, and if the user does not do any operation with the keyboard, the TrackPoint, the hard disk drive, the parallel connector, or the diskette drive within that time.
- If the timer conditions are satisfied in suspend mode.

When the power is turned on, the computer returns from hibernation mode and resumes operation. The hibernation file in the boot record on the hard disk drive is read, and system status is restored from the hard disk drive.

Symptom-to-FRU index

This section contains following information:

The symptom-to-FRU index in this section lists symptoms and errors and their possible causes. The most likely cause is listed first, in boldface type.

Note: Do the FRU replacement or other actions in the sequence shown in the column headed "FRU or action, in sequence." If replacing a FRU does not solve the problem, put the original part back in the computer. Do not replace a nondefective FRU.

This index can also help you determine, during regular servicing, what FRUs are likely to need to be replaced next.

A numeric error is displayed for each error detected in POST or system operation. In the displays, **n** can be any number.

If no numeric code is displayed, check the narrative descriptions of symptoms. If the symptom is not described there, go to "Intermittent problems" on page 69.

Note:
For a device not supported by diagnostic codes in the ThinkPad Notebooks, see the manual for that device.

Numeric error codes

Table 2. Numeric error codes

Symptom or error	FRU or action, in sequence
0175 Bad CRC1, stop POST task—The EEPROM checksum is not correct.	**System board.**
0176 System Security—The system has been tampered with.	1. **Run BIOS Setup Utility, and save the current setting by pressing F10.** 2. System board.
0177 Bad SVP data, stop POST task—The checksum of the supervisor password in the EEPROM is not correct.	**System board.**
0182 Bad CRC2. Enter BIOS Setup and load Setup defaults.—The checksum of the CRS2 setting in the EEPROM is not correct.	1. **Run BIOS Setup Utility. Press F9, and Enter to load the default setting. Then save the current setting by pressing F10.** 2. System board.
0185 Bad startup sequence settings. Enter BIOS Setup and load Setup defaults.	1. **Run BIOS Setup Utility. Press F9, and Enter to load the default setting. Then save the current setting by pressing F10.**

Table 2. Numeric error codes (continued)

Symptom or error	FRU or action, in sequence
0187 EAIA data access error—The access to EEPROM is failed.	**System board.**
0188 Invalid RFID Serialization Information Area.	**System board.**
0189 Invalid RFID configuration information area—The EEPROM checksum is not correct.	**System board.**
0190 Critical low-battery error	1. **Charge the battery pack.** 2. Battery pack.
0191 System Security—Invalid Remote Change requested.	1. **Run BIOS Setup Utility, and then save current setting by pressing F10.** 2. System board.
0192 System Security— Embedded Security hardware tamper detected.	**System board.**
0199 System Security— Security password retry count exceeded.	1. **Run BIOS Setup Utility, and then save the current setting by pressing F10.** 2. System board.
01C8 Two or more modem devices are found. Remove all but one of them. Press <Esc> to continue.	1. **Remove either a Mini-PCI Card or a modem daughter card. Otherwise, press Esc to ignore the warning message.** 2. System board.
01C9 More than one Ethernet devices are found. Remove one of them. Press <Esc> to continue.	1. **Remove the Ethernet device that you installed; or press Esc to ignore the warning message.** 2. System board.
01CA More than one Wireless LAN devices are found. Remove one of them.	1. **Remove the wireless LAN device that you installed**. 2. System board.
0200 Hard disk error—The hard disk is not working.	1. **Reseat the hard disk drive.** 2. Load Setup Defaults in BIOS Setup Utility. 3. Hard disk drive. 4. System board.
021x Keyboard error.	**Run interactive tests of the keyboard and the auxiliary input device.**
0220 Monitor type error—Monitor type does not match the one specified in CMOS.	**Load Setup Defaults in BIOS Setup Utility.**
0230 Shadow RAM error—Shadow RAM fails at offset nnnn.	**System board.**
0231 System RAM error—System RAM fails at offset nnnn.	1. **DIMM.** 2. System board.
0232 Extended RAM error— Extended RAM fails at offset nnnn.	1. **DIMM.** 2. System board.

Table 2. Numeric error codes (continued)

Symptom or error	FRU or action, in sequence
0250 System battery error—System battery is dead.	1. **Charge the backup battery for more than 8 hours by connecting the ac adapter.** 2. Replace the backup battery and run BIOS Setup Utility to reset the time and date.
0251 System CMOS checksum bad— Default configuration used.	1. **Charge the backup battery for more than 8 hours by connecting the ac adapter.** 2. Replace the backup battery and run BIOS Setup Utility to reset the time and date.
0252 Password checksum bad—The password is cleared.	**Reset the password by running BIOS Setup Utility.**
0260 System timer error.	1. **Charge the backup battery for more than 8 hours by connecting the ac adapter.** 2. Replace the backup battery and run BIOS Setup Utility to reset the time and date. 3. System board.
0270 Real-time clock error.	1. **Charge the backup battery for more than 8 hours by connecting the ac adapter.** 2. Replace the backup battery and run BIOS Setup Utility to reset the time and date. 3. System board.
0271 Date and time error—Neither the date nor the time is set in the computer.	**Run BIOS Setup Utility to reset the time and date.**
0280 Previous boot incomplete— Default configuration used.	1. **Load "Setup Default" in BIOS Setup Utility.** 2. DIMM. 3. System board.
02F0 CPU ID:xx Failed.	1. **CPU.** 2. System board.
02F4 EISA CMOS not writable.	1. **Load Setup Defaults in BIOS Setup Utility.** 2. Replace the backup battery. 3. System board.
02F5 DMA test failed.	1. **DIMM.** 2. System board.
02F6 Software NMI failed	1. **DIMM.** 2. System board.
02F7 Fail-safe timer NMI failed	1. **DIMM.** 2. System board.
1802 Unauthorized network card is plugged in—Turn off and remove the miniPCI network card.	1. **Remove Mini PCI network card.** 2. System board.
1803 Unauthorized daughter card is plugged in—Turn off and remove the daughter card.	1. **Remove the daughter card that you installed.** 2. System board.

Table 2. Numeric error codes (continued)

Symptom or error	FRU or action, in sequence
1804 Unauthorized WAN card is plugged in—Power off and remove the WAN card.	1. **Remove the WAN card that you installed.** 2. System board.
1820 More than one external fingerprint reader is attached. Power off and remove all but the reader that you set up within your main operating system.	**Remove all but the reader that you set up for the authentication.**
1830 Invalid memory configuration—Power off and install a memory module to Slot-0 or the lower slot.	**Install DIMM in Slot-0, but not in Slot-1.** **Note:** For the construction of the DIMM slot, see "1050 DIMM" on page 91.
2000 Hard Drive Active Protection sensor diagnostics failed.Press <Esc> to continue.Press <F1> to enter SETUP	1. Undock docking station or port replicator if it is attached to the ThinkPad Notebook. 2. Place the ThinkPad Notebook on a horizontal surface. Do not apply any physical shock to the computer. 3. Run **Diagnostics** --> **ThinkPad Devices** --> **HDD Active Protection Test**.
2010 Warning: Your internal hard disk drive (HDD) may not function correctly on this system. Ensure that your HDD is supported on this system and that the latest HDD firmware is installed.	Inform the following information to the customer: If in the primary bay the customer is using a non-IBM or non-Lenovo hard disk drive (HDD), or an old generation IBM HDD which is not supported by this system, with the risk in mind, the customer can still use it by pressing ESC. If in the primary drive bay the customer is using a supported IBM/Lenovo HDD with an old firmware, the customer needs to update its firmware to the latest. The latest version is available at `http://www.lenovo.com/support`
2100 Initialization error on HDD0 (Main hard disk drive)	1. **Reseat the hard disk drive.** 2. Main hard disk drive. 3. System board.
2102 Initialization error on HDD1 (Ultrabay hard disk drive)	1. **Reseat the hard disk drive.** 2. Ultrabay™ hard disk drive. 3. System board.
2110 Read error on HDD0 (Main hard disk drive)	1. **Reseat the hard disk drive.** 2. Main hard disk drive. 3. System board.
2112 Read error on HDD1 (Ultrabay hard disk drive)	1. **Reseat the hard disk drive.** 2. Ultrabay hard disk drive. 3. System board.

Error messages

Table 3. Error messages

Symptom or error	FRU or action, in sequence
Device address conflict.	1. **Load "Setup Defaults" in the BIOS Setup Utility**. 2. Backup battery. 3. System board.
Allocation error for device.	1. **Load "Setup Defaults" in the BIOS Setup Utility**. 2. Backup battery. 3. System board.
Failing bits: nnnn.	1. **DIMM**. 2. System board.
Invalid system configuration data.	1. **DIMM**. 2. System board.
I/O device IRQ conflict.	1. **Load "Setup Defaults" in the BIOS Setup Utility**. 2. Backup battery. 3. System board.
Hibernation error.	1. **Restore the system configuration to what it was before the computer entered hibernation mode**. 2. If memory size has been changed, re-create the hibernation file.
Fan error.	1. **Fan**. 2. Thermal grease. 3. System board.
Thermal sensing error.	**System board**.
Cannot boot from any device.	**Check the status of device which you want to boot from.** Device not found. 1. The device you want to boot from. 2. System board. Device Error. 1. The device you want to boot from. 2. System board. No valid operating system. 1. Check that the operating system has no failure and is installed correctly. 2. Reinstall the operation system. Excluded from boot order. • Enter the BIOS Setup Utility and add the device in boot order.

Beep symptoms

Table 4. Beep symptoms

Symptom or error	FRU or action, in sequence
One beep and a blank, unreadable, or flashing LCD.	1. **Reseat the LCD connector**. 2. LCD assembly. 3. External CRT. 4. System board.
One long and two short beeps, and a blank or unreadable LCD.	1. **System board**. 2. LCD assembly. 3. DIMM.
Two short beeps with error codes.	**POST error. See "Numeric error codes" on page 62.**
Two short beeps and a blank screen.	1. **System board**. 2. DIMM.
Three short beeps, pause, three more short beeps, and one short beep.	1. **DIMM**. 2. System board
One short beep, pause, three short beeps, pause, three more short beeps, and one short beep.	1. **DIMM**. 2. System board
Only the cursor appears.	**Reinstall the operating system**.
Four cycles of four short beeps and a blank screen.	**System board** (security chip)
Five short beeps and a blank screen.	**System board**

No-beep symptoms

Table 5. No-beep symptoms

Symptom or error	FRU or action, in sequence
No beep, power-on indicator on, LCD blank, and no POST.	1. **Make sure that every connector is connected tightly and correctly**. 2. DIMM. 3. System board.
No beep, power-on indicator on, and LCD blank during POST.	1. **Reseat DIMM**. 2. System board.
The power-on password prompt appears.	A power-on password or a supervisor password is set. Type the password and press **Enter**.
The hard-disk password prompt appears.	A hard-disk password is set. Type the password and press **Enter**.

LCD-related symptoms

Important: The TFT LCD for the notebook computer contains many thin-film transistors (TFTs). The presence of a small number of dots that are missing, discolored, or always lighted is characteristic of TFT LCD technology, but excessive pixel problems can cause viewing concerns.

If the LCD you are servicing has two or less visible defective pixels, it should not be considered faulty. However, if the LCD has three or more visible defective pixels, it will be deemed as defective by Lenovo and it should be replaced.

Notes:

- This policy applies to all ThinkPad Notebooks purchased on 1 January, 2008 or later.
- Lenovo will not provide replacement if the LCD is within specification as we cannot guarantee that any replacement LCD will have zero pixel defects.
- One pixel consists of R, G, B sub-pixels.

Table 6. LCD-related symptoms

Symptom or error	FRU or action, in sequence
No beep, power-on indicator on, and a blank LCD during POST.	**System board**.
• LCD backlight not working. • LCD too dark. • LCD brightness cannot be adjusted. • LCD contrast cannot be adjusted.	1. **Reseat the LCD connectors**. 2. LCD assembly. 3. System board.
• LCD screen unreadable. • Characters missing pixels. • Screen abnormal. • Wrong color displayed.	1. **See important note for "LCD-related symptoms."** 2. Reseat all LCD connectors. 3. LCD assembly. 4. System board.
Horizontal or vertical lines displayed on LCD.	**LCD assembly**.

Intermittent problems

Intermittent system hang problems can be due to a variety of causes that have nothing to do with a hardware defect, such as cosmic radiation, electrostatic discharge, or software errors. FRU replacement should be considered only when a problem recurs.

When analyzing an intermittent problem, do the following:

1. Run the diagnostic test for the system board in loop mode **at least 10 times**.
2. If no error is detected, do **not** replace any FRUs.
3. If any error is detected, replace the FRU shown by the FRU code. Rerun the test to verify that no more errors exist.

Undetermined problems

If the diagnostic tests did not identify the adapter or device that has failed, if wrong devices are installed, or if the system simply is not operating, follow these procedures to isolate the failing FRU (do not isolate FRUs that have no defects).

Verify that all attached devices are supported by the computer.

Verify that the power supply being used at the time of the failure is operating correctly. (See “Power system checkout” on page 52.)

1. Turn off the computer.
2. Visually check each FRU for damage. Replace any damaged FRU.
3. Remove or disconnect all of the following devices:
   a. Non-ThinkPad devices
   b. Devices attached to the docking station or the port replicator
   c. Printer, mouse, and other external devices
   d. Battery pack
   e. Hard disk drive
   f. External diskette drive or optical drive
   g. DIMM
   h. Optical disk or diskette in the internal drive
   i. PC Cards
4. Turn on the computer.
5. Determine whether the problem has been solved.
6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.
7. If the problem remains, replace the following FRUs one at a time (do not replace a nondefective FRU):
   a. System board
   b. LCD assembly

Status indicators

This chapter presents the system status indicators that show the status of the computer.

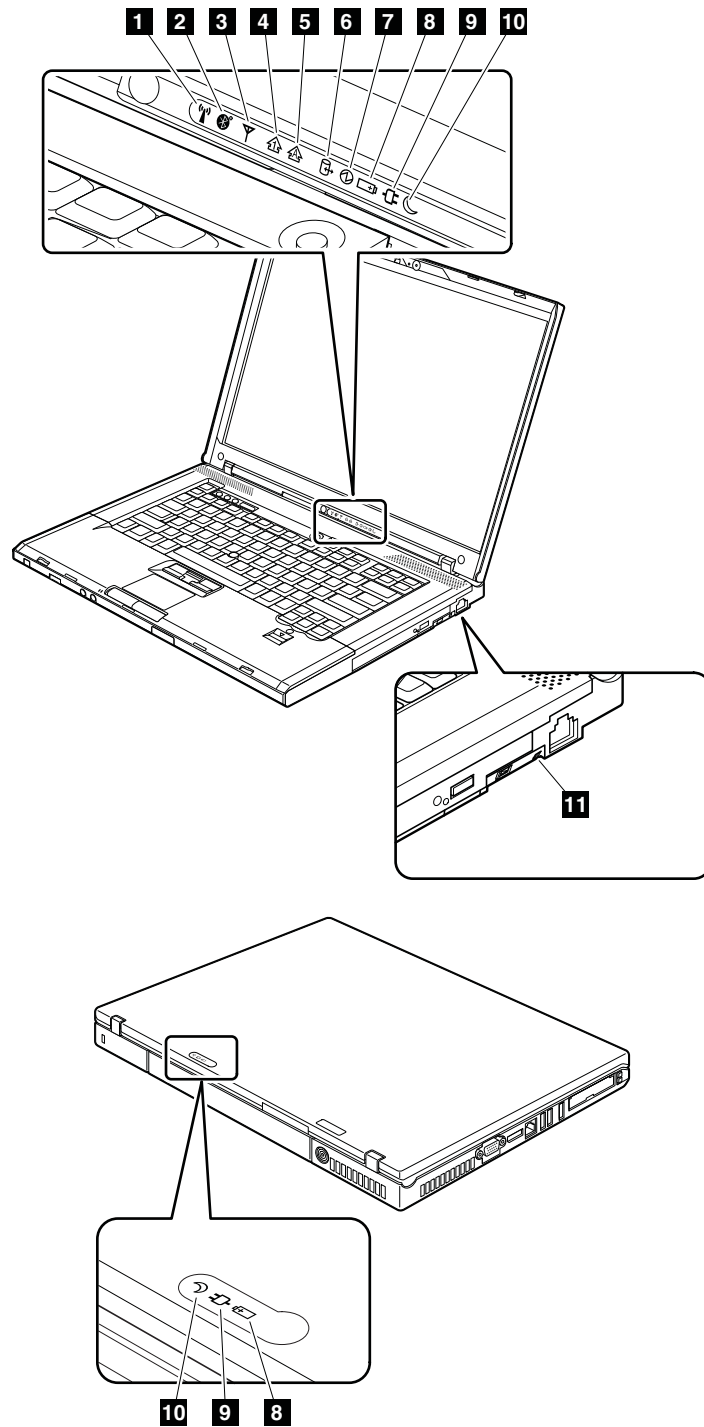



Table 7. Status indicators

Indicator		Meaning
1	Wireless status	**Green:** The wireless feature (802.11 standard or 802.11n) is on, and the radio link is ready for use. **Blinking green:** Data is being transmitted.
2	Wireless PAN status	**Green:** *Bluetooth* wireless is operational. This indicator is on when *Bluetooth* wireless is on and not in suspend mode.
3	Wireless WAN status	**Green:** The wireless WAN is on, and the radio link is ready for use. **Blinking green:** Data is being transmitted.
4	Num lock	**Green:** The numeric keypad on the keyboard is enabled. To enable or disable the keypad, press and hold the Shift key, and press the NumLk (ScrLk) key.
5	Caps lock	**Green:** Caps Lock mode is enabled. To enable or disable Caps Lock mode, press the Caps Lock key.
6	Drive in use	**Green:** Data is being read from or written to the hard disk drive, the diskette drive, or the drive in the Serial Ultrabay Slim device. When this indicator is on, do not put the computer into sleep (standby) mode or turn off the computer. **Note:** Do not move the system while the green drive-in-use light is on. Sudden physical shock could cause drive errors.
7	Power on	**Green:** The computer is on and ready to use. This indicator stays lit whenever the computer is on and is not in sleep (standby) mode.
8	Battery status	**Green:** The battery is charged between 80% to 100% of the capacity, and being discharged between 0% to 80% of the capacity. **Blinking green:** The battery is charged between 20% to 80% of the capacity, and being charged. **Orange:** The battery is charged between 5% and 20% of the capacity, and being discharged. **Blinking orange (slow):** The battery is charged between 5% to 20% of the capacity, and being charged. **Blinking orange (rapid):** The battery is charged between 0% to 5% of the capacity.
9	AC power status	**Green:** The computer is connected to the ac power supply.
10	Sleep (standby) status	**Green:** The computer is in sleep (standby) mode. **Blinking green:** The computer is entering sleep (standby) mode or hibernation mode, or is resuming normal operation.

Table 7. Status indicators (continued)

Indicator		Meaning
11	Serial Ultrabay Slim status	**Green:** A Serial Ultrabay Slim device is installed and in use. **Blinking green:** A Serial Ultrabay Slim device is in the process of being detached. **Turn off:** A Serial Ultrabay Slim device is ready to be attached or detached. **Note:** If you are using Windows 2000, the Serial Ultrabay Slim status indicator does not blink while a Serial Ultrabay Slim device is being detached. Instead, a message box pops up when the process is completed; then the indicator turns off.

Fn key combinations

The following table shows the function of each combination of Fn with a function key.

Table 8. Fn key combinations

Key combination	Description
Fn+F1	Reserved.
Fn+F2	Lock the computer.
Fn+F3	Select a power plan (in Windows XP, power scheme) that has been created by Power Manager, or adjust the power level by using the slider control. When you press this combination, a panel for selecting a power plan (power scheme) appears. **Notes:** 1. To use the Fn+F3 key combination, you must have the ThinkPad PM device driver installed on the computer. 2. If you have logged on with an administrator user ID, and you press Fn+F3, the panel for selecting a power plan (power scheme) appears. If you have logged on with another user ID, and you press Fn+F3, the panel does not appear. 3. You cannot turn off the computer display by pressing Fn+F3.
Fn+F4	Put the computer in sleep (standby) mode. To return to normal operation, press the Fn key only, without pressing a function key. **Notes:** 1. To use the Fn+F4 key combination, you must have the ThinkPad PM device driver installed on the computer. 2. If you want to use the combination to put the computer into hibernation mode or do-nothing mode (in Windows XP, shut the computer down or show the panel for turning off the computer), change the settings in the Power Manager.
Fn+F5	Enable or disable the built-in wireless networking features and the *Bluetooth* features. If you press Fn+F5, a list of wireless features is displayed. You can quickly change the power state of each feature in the list. **Note:** If you want to use Fn+F5 to enable the wireless feature, the following device drivers must be installed on the computer beforehand: • ThinkPad Power Management driver • OnScreen Display Utility • Wireless device drivers
Fn+F6	Reserved.

Table 8. Fn key combinations (continued)

Key combination	Description
Fn+F7	Apply a presentation scheme directly, with no need to start Presentation Director. To disable this function and use the Fn+F7 key combination for switching a display output location, start Presentation Director, and change the settings. **Note:** If the computer is a windows 7 model, it does not support presentation schemes, but the Fn+F7 combination is available for switching a display output location.
	For Windows 7: Switch a display output location • Computer display only (LCD) • Computer display and external monitor (same image) • Computer display and external monitor (extended desktop) • External monitor only **Note:** To switch between the computer display and an external monitor, the Win+P key combination is also available. **For Windows Vista and Windows XP:** Switch a display output location • External monitor • Computer display (LCD) and external monitor • Computer display (LCD) **Notes:** 1. This function is not supported if different desktop images are displayed on the computer display and the external monitor (the Extend desktop function). 2. This function does not work while a DVD movie or a video clip is playing. To enable this function, start Presentation Director, and change the Fn+F7 settings. **Note:** Multiple users can log on to a single operating system by using different user IDs. Each user needs to change the settings.
Fn+F8	Change the settings of the UltraNav® pointing device.
Fn+F9	Open the ThinkPad EasyEject Utility screen. Buttons for the following choices are displayed: • **Eject ThinkPad PC from Dock**: This button is displayed only if the ThinkPad computer has been attached to a docking station. The computer can be detached from the docking station. • **Eject ThinkPad PC from Mini Dock**: This button is displayed only if the ThinkPad computer has been attached to a port replicator and one or more USB devices have been connected to the port replicator. You can stop and remove all the USB devices safely by clicking the button. **Note:** You cannot use this Utility to detach the computer from the port replicator. • **Run EasyEject Actions**: This button is used to select, stop, or remove external devices connected to the ThinkPad computer. • **Configure EasyEject Actions**: Opens the ThinkPad EasyEject Utility main window. • **Fn+F9 Settings**: Configures the settings for the Fn+F9 function. **Note:** If the computer is a Windows 7 model, it does not support the EasyEject Utility function.

Table 8. Fn key combinations (continued)

Key combination	Description
Fn+F10	Reserved.
Fn+F11	Reserved.
Fn+F12	Put the computer into hibernation mode. To return to normal operation, press the power button for less than four seconds. **Note:** To use Fn+F12 for hibernation, you must have the ThinkPad PM device driver installed on the computer.
Fn+PgUp	Turn the ThinkLight® on or off. **Note:** This function is supported only on the ThinkPad computers that have the ThinkLight. The on or off status of the ThinkLight is shown on the screen for a few seconds when you press Fn+PgUp.
Fn+Home	The computer display becomes brighter.
Fn+End	The computer display becomes dimmer.
Fn+Spacebar	Enable the FullScreen Magnifier function.
Fn+PrtSc	Has the same function as the SysRq key.
Fn+ScrLk	Enable or disable the numeric keypad.
Fn+Pause	Has the same function as the Break key.
Fn+cursor keys	These key combinations work with Windows Media Player. Fn+down arrow key works for the Play or Pause button, Fn+up arrow key for the Stop button, Fn+right arrow key for the Next Track button, and Fn+left arrow key for the Previous Track button.

FRU replacement notices

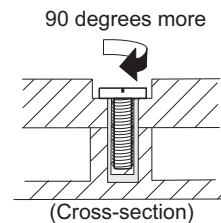
This chapter presents notices related to removing and replacing parts. Read this chapter carefully before replacing any FRU.

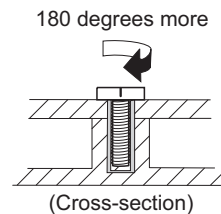
Screw notices

Loose screws can cause a reliability problem. In the ThinkPad Notebook, this problem is addressed with special nylon-coated screws that have the following characteristics:
- They maintain tight connections.
- They do not easily come loose, even with shock or vibration.
- They are harder to tighten.
- Each one should be used only once.

Do the following when you service this machine:
- Keep the screw kit (for the P/N, see "Miscellaneous parts" on page 239) in your tool bag.
- Always use new screws.
- Use a torque screwdriver if you have one.

Tighten screws as follows:
- **Plastic to plastic**

  Turn an additional **90 degrees** after the screw head touches the surface of the plastic part:

- **Logic card to plastic**

  Turn an additional **180 degrees** after the screw head touches the surface of the logic card:

- **Torque driver**

  If you have a torque driver, refer to the "Torque" column for each step.
- Make sure that you use the correct screw. If you have a torque screwdriver, tighten all screws firmly to the torque shown in the table. **Never use a screw that you removed. Use a new one. Make sure that all of the screws are tightened firmly.**
- Ensure torque screw drivers are calibrated correctly following country specifications.

Retaining serial numbers

This section includes the following descriptions:
- "Restoring the serial number of the system unit"
- "Retaining the UUID"
- "Reading or writing the ECA information" on page 81

Restoring the serial number of the system unit

When the computer was manufactured, the EEPROM on the system board was loaded with the serial numbers of the system and all major components. These numbers need to remain the same throughout the life of the computer.

If you replace the system board, you must restore the serial number of the system unit to its original value.

Before replacing the system board, save the original serial number by doing the following:

1. Install the LENOVO ThinkPad Hardware Maintenance Diskette Version 1.76 or later, and restart the computer.
2. From the main menu, select **1. Set System Identification**.
3. Select **2. Read S/N data from EEPROM**.

The serial number of each device in your computer is displayed; the serial number of the system unit is listed as follows:
- 20: Serial number

Write down that number.

Note: The serial number of the system unit is also written on the label attached to the bottom of the computer.

After you have replaced the system board, restore the serial number by doing the following:

1. Install the LENOVO ThinkPad Hardware Maintenance Diskette Version 1.76 or later and restart the computer.
2. From the main menu, select **1. Set System Identification**.
3. Select **1. Add S/N data from EEPROM**.

   Follow the instructions on the screen.

If the MTM and Product ID numbers differ from each other on the rear label, use what is shown for the Product ID field. See example below:

MTM on rear label:
: TTTT-CTO S/N SSSSSSS

Product ID on rear label:
: TTTT-MMM (Use this number when setting Serial Number)

In the example, the Serial Number to be input is '1STTTTMMMSSSSSSS'.

Retaining the UUID

The Universally Unique Identifier (UUID) is a 128-bit number uniquely assigned to your computer at production and stored in the EEPROM of your system board.

The algorithm that generates the number is designed to provide unique IDs until the year A.D. 3400. No two computers in the world have the same number.

When you replace the system board, you must set the UUID on the new system board as follows:

1. Install the LENOVO ThinkPad Hardware Maintenance Diskette Version 1.76 or later, and restart the computer.
2. From the main menu, select **4. Assign UUID**.

   A new UUID is created and written. If a valid UUID already exists, it is not overwritten.

Reading or writing the ECA information

Information on Engineering Change Announcements (ECA) are stored in the EEPROM of the system board. The electronic storage of this information simplifies the procedure to check if the ECA has been previously applied to a machine. The machine does not need to be disassembled to check for the ECA application.

To check what ECAs have been previously applied to the machine, use the ECA Information Read/Write function on the LENOVO ThinkPad Hardware Maintenance Diskette Version 1.76 or later.

1. Insert the LENOVO ThinkPad Hardware Maintenance Diskette Version 1.76 or later, and restart the computer.
2. From the main menu, select **6. Set ECA Information**.
3. To read ECA information, select **2. Read ECA/rework number from EEPROM** and follow the instruction.
4. To read box build date, select **5. Read box build date from EEPROM**, and follow the instruction on the screen.

After an ECA has been applied to the machine, the EEPROM must be updated to reflect the ECA's application. Use the LENOVO ThinkPad Hardware Maintenance Diskette Version 1.76 or later to update the EEPROM.

Note: Only the ECA number is stored in the EEPROM. The machine type of the ECA is assumed be the same as the machine type of the machine that had the ECA applied to it.

1. Insert the LENOVO ThinkPad Hardware Maintenance Diskette Version 1.76 or later, and restart the computer.
2. From the main menu, select **6. Set ECA Information**.
3. To write ECA information, select **1. Write ECA/rework number from EEPROM**, and follow the instruction.
4. To write box build date, select **4. Write box build date from EEPROM**, and follow the instruction on the screen.

If the system board is being replaced, try to read the ECA information from the old system board and transfer the information to the new system. If the system board is inoperable, this will not be possible.

Removing and replacing a FRU

This chapter presents directions and drawings for use in removing and replacing a FRU. Be sure to observe the following general rules:

1. Do not try to service any computer unless you have been trained and certified. An untrained person runs the risk of damaging parts.
2. Before replacing any FRU, review “FRU replacement notices” on page 79.
3. Begin by removing any FRUs that have to be removed before the failing FRU. Any such FRUs are listed at the top of the page. Remove them in the order in which they are listed.
4. Follow the correct sequence in the steps for removing the FRU, as given in the drawings by the numbers in square callouts.
5. When turning a screw to replace a FRU, turn it in the direction as given by the arrow in the drawing.
6. When removing the FRU, move it in the direction as given by the arrow in the drawing.
7. To put the new FRU in place, reverse the removal procedure and follow any notes that pertain to replacement. For information about connecting and arranging internal cables, see “Locations” on page 141.
8. When replacing a FRU, use the correct screw as shown in the procedures.

DANGER

Before removing any FRU, turn off the computer, unplug all power cords from electrical outlets, remove the battery pack, and then disconnect any interconnecting cables.

Attention: After replacing a FRU, do not turn on the computer until you have made sure that all screws, springs, and other small parts are in place and none are loose inside the computer. Verify this by shaking the computer gently and listening for rattling sounds. Metallic parts or metal flakes can cause electrical short circuits.

Attention: The system board is sensitive to, and can be damaged by, electrostatic discharge. Before touching it, establish personal grounding by touching a ground point with one hand or by using an electrostatic discharge (ESD) strap (P/N 6405959).

1010 Battery pack

Important notice for replacing a battery pack:
ThinkVantage Toolbox (in Windows 7) and Lenovo System Toolbox (in Windows Vista and Windows XP) have an automatic battery diagnostic that determines if the battery pack is defective. A battery pack FRU should not be replaced unless this diagnostic shows that the battery is defective.

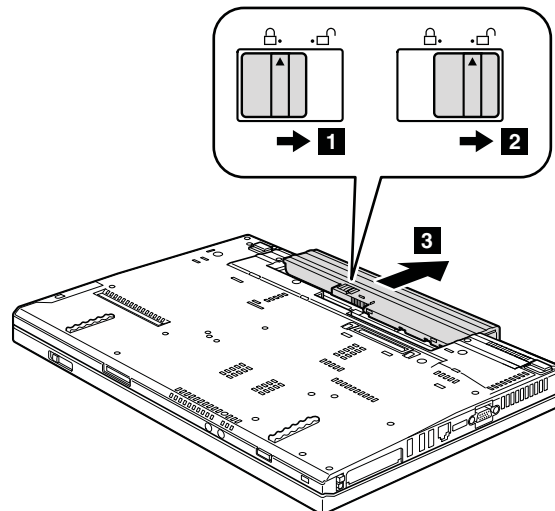
The only exception to this is if the battery pack is physically damaged or a customer is reporting a possible safety issue.

If ThinkVantage Toolbox or Lenovo System Toolbox is not installed in the computer, the customer should download this program before a non-physically damaged battery pack is replaced. Note that a physically damaged battery pack is non-warranty replacement.

DANGER

Use only the battery specified in the parts list for your computer. Any other battery could ignite or explode.

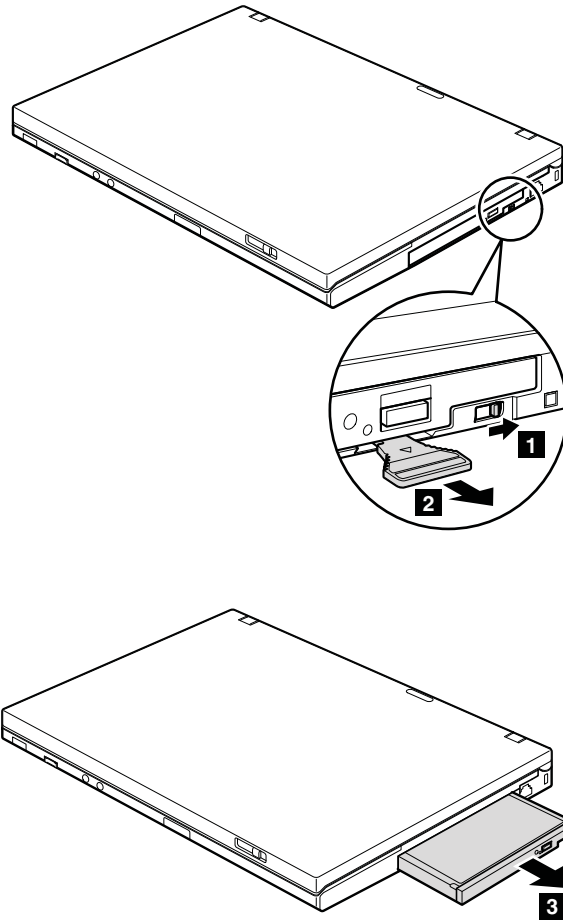
Table 9. Removal steps of battery pack

Unlock the battery release lever **1**. Holding the battery release lever in the unlocked position **2**, remove the battery pack in the direction shown by arrow **3**.

When installing: Install the battery pack along the slide rails of the slot. Then make sure that the battery release lever is in the locked position.

1020 Serial Ultrabay Slim device

Note:
Serial Ultrabay Slim does not accept any of the following devices:
- Ultrabay Plus™ devices
- Ultrabay 2000™ devices
- Ultrabay Enhanced devices
- Ultrabay Slim devices
- Ultrabay devices

Table 10. Removal steps of Serial Ultrabay Slim device

When you release the switch in step **1**, the lever pops out. In step **2**, pull the lever a little to release the device from the bay.

1030 Hard disk drive (HDD) cover, HDD and HDD rubber rails or solid state drive (SSD) and storage converter

For access, remove this FRU:

- “1010 Battery pack” on page 84

Attention:

- **Do not drop the hard disk drive or apply any physical shock to it.** The hard disk drive is sensitive to physical shock. Improper handling can cause damage and permanent loss of data.
- Before removing the drive, have the user make a backup copy of all the information on it if possible.
- Never remove the drive while the system is operating or is in suspend mode.

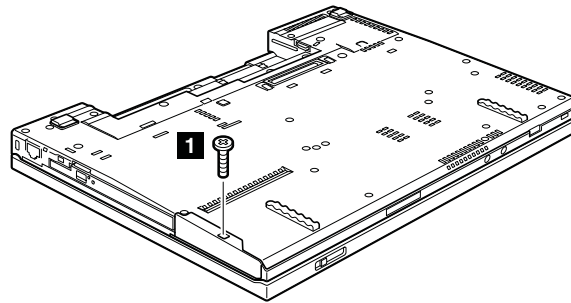
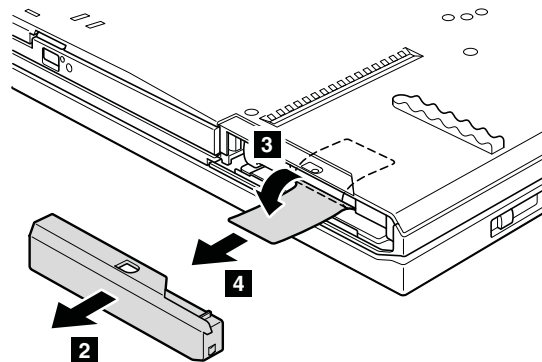
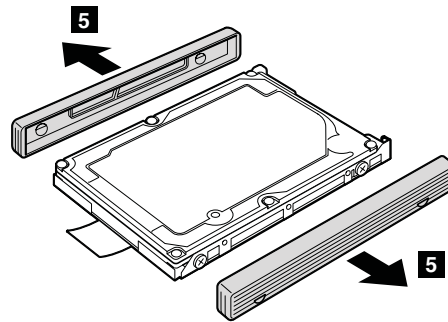
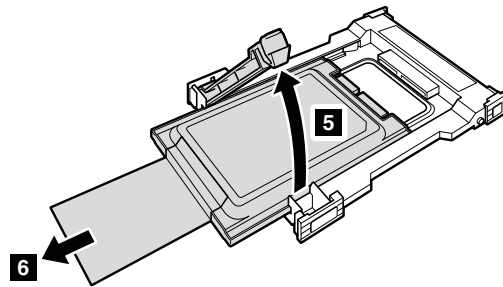
Table 11. Removal steps of HDD cover, HDD and HDD rubber rails or SSD and storage converter

Step	Screw (quantity)	Color	Torque
1	Hard disk drive screw, nylon-coated (1)	Black	0.189 Nm (1.85 kgfcm)

When installing: Make sure that the HDD connector or SSD connector is attached firmly.

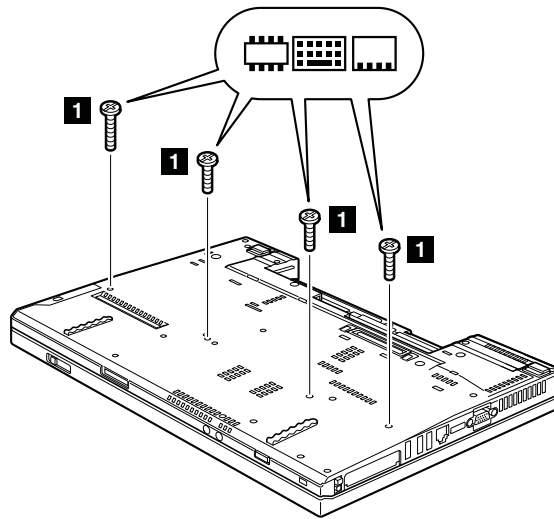
Table 11. Removal steps of HDD cover, HDD and HDD rubber rails or SSD and storage converter (continued)

HDD and HDD rubber rails:

When installing: The rubber rails on the hard disk drive must be attached to the replacement drive. Otherwise the drive cannot be installed properly.

SSD and storage converter:

1040 Palm rest or palm rest with fingerprint reader

For access, remove this FRU in order:
- "1010 Battery pack" on page 84

> **Note:**
> In models with the fingerprint reader, the sensor is attached to the palm rest FRU. If the fingerprint reader has any defects, you can replace it by the procedures given in this section, which are the same for a palm rest with or without a fingerprint reader.

Table 12. Removal steps of palm rest

Step	Icon	Screw (quantity)	Color	Torque
1		M2 × 14 mm, wafer-head, nylon-coated (4)	Black	0.189 Nm (1.85 kgfcm)

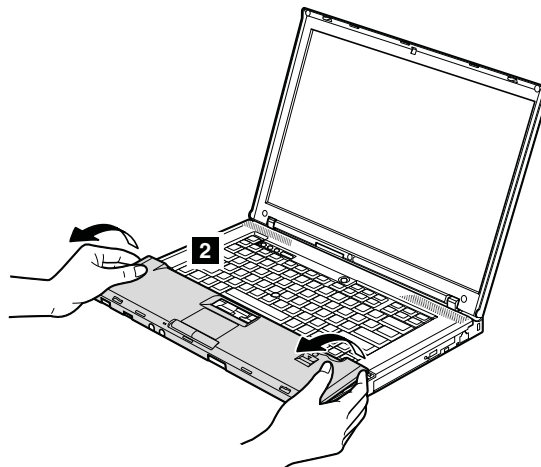



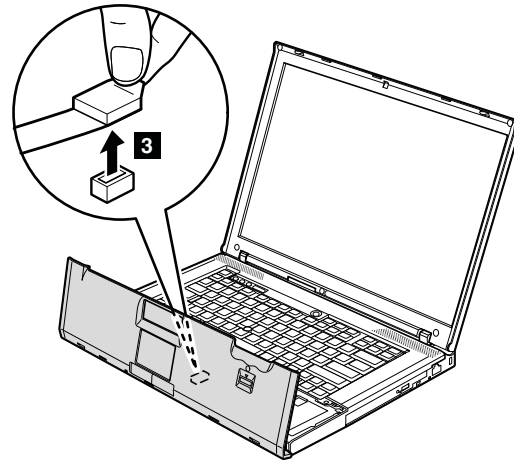
Table 12. Removal steps of palm rest (continued)

When installing: When you attach the palm rest, do as follows:

Table 13. Installation of the palm rest

1. Attach the fingerprint reader connector firmly to the system board.

2. Attach the palm rest so that the two projections of the palm rest (a) firmly fit into the guide holes of the keyboard bezel as shown in this figure.

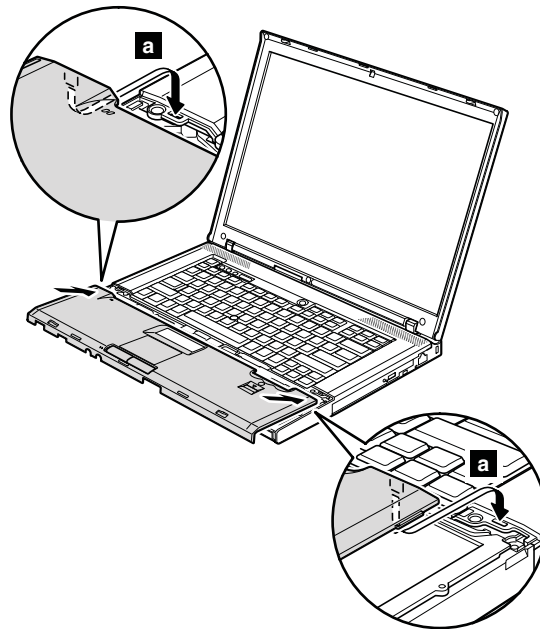
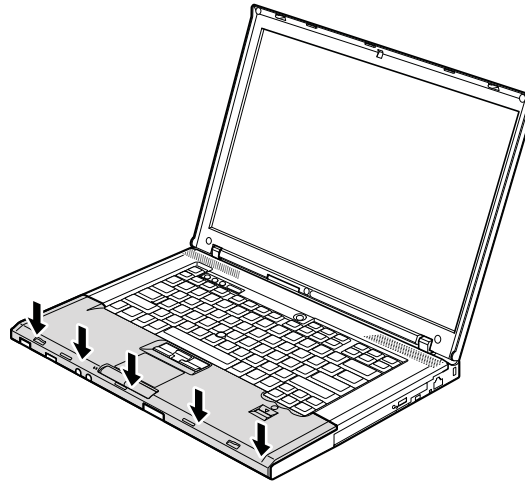



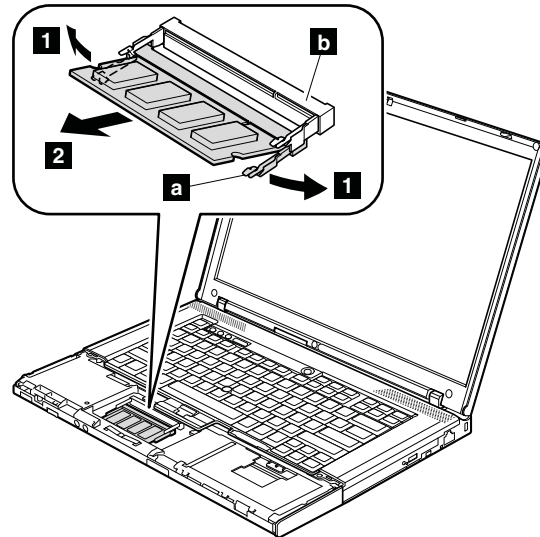
Table 13. Installation of the palm rest (continued)

3. Push the front side of the palm rest until it clicks into place.

4. Close the LCD cover and turn the computer over. Then fasten the four screws to secure the palm rest.

1050 DIMM

For access, remove these FRUs in order:
- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88

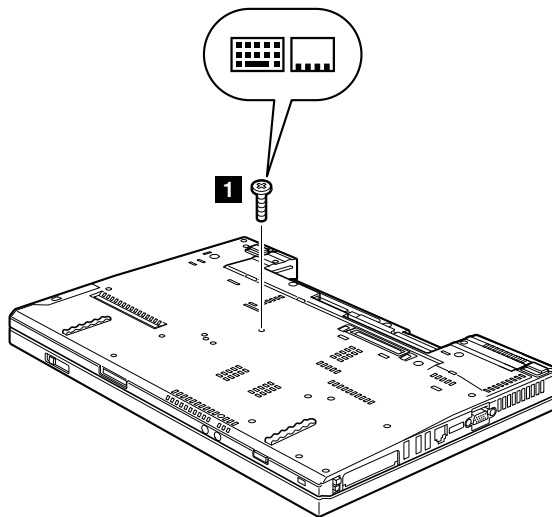
Table 14. Removal steps of DIMM

Note: If only one DIMM is used on the computer you are servicing, the card must be installed in SLOT-0 (a : lower slot), but not in SLOT-1 (b : upper slot).

When installing: Insert the notched end of the DIMM into the socket. Press the DIMM firmly, and pivot it until it snaps into the place. Make sure that it is firmly fixed in the slot and does not move easily.

1060 Keyboard

For access, remove these FRUs in order:

- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88

Table 15. Removal steps of keyboard

Step	Icon	Screw (quantity)	Color	Torque
1		M2 × 14 mm, wafer-head, nylon-coated (1)	Black	0.189 Nm (1.85 kgfcm)

Lift the keyboard a little in the direction shown by arrow 2, and then detach the connector 3.

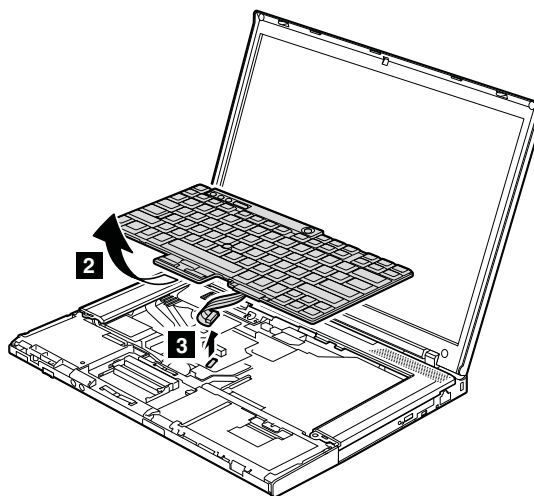
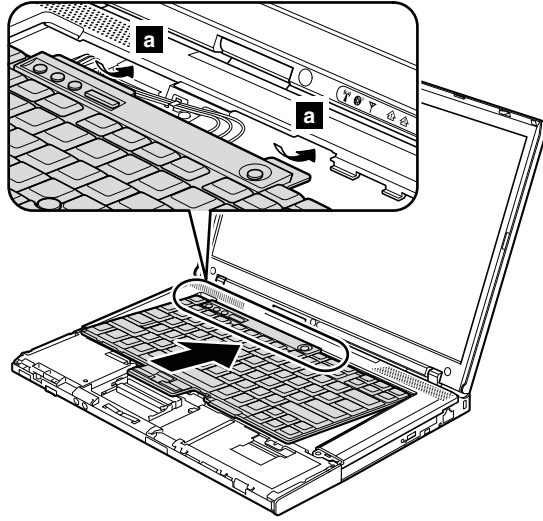
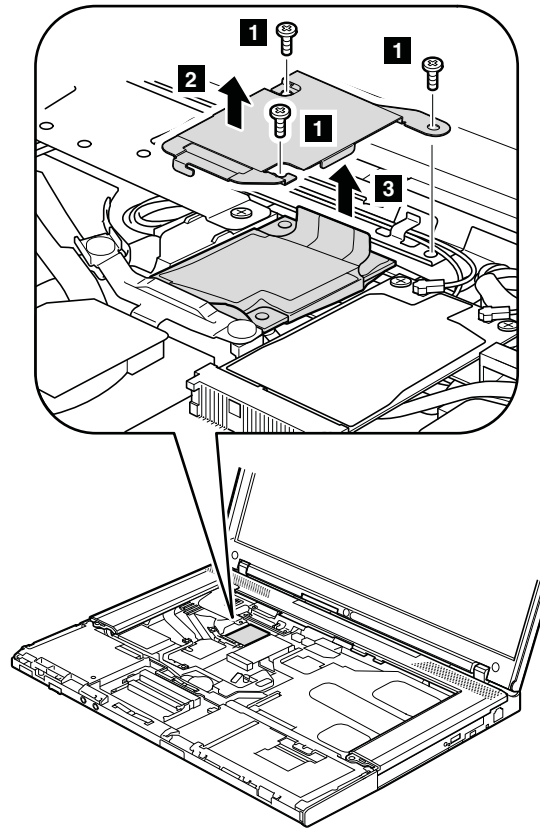



Table 15. Removal steps of keyboard (continued)

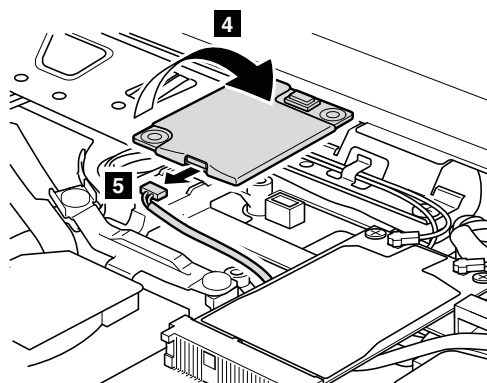
When installing: Make sure that the keyboard edges **a** are under the frame as shown in this figure.

1070 Modem daughter card (MDC-3.0)

For access, remove these FRUs in order:
- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92

Table 16. Removal steps of MDC-3.0

Step	Screw (quantity)	Color	Torque
1	M2 × 3 mm, small-head, nylon-coated (3)	Silver	0.189 Nm (1.85 kgfcm)

In step 3, remove the card by pulling the tab with your fingers in the direction shown by the arrow.

Table 16. Removal steps of MDC-3.0 (continued)

Turn the card over **4**, and detach the modem connector **5**.

When installing: Make sure that the modem connector and the connector on the underside of the card are attached firmly.

1080 PCI Express Mini Card for wireless LAN/WiMAX

For access, remove these FRUs in order:
- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92

Table 17. Removal steps of PCI Express Mini Card for wireless LAN/WiMAX

In step **1**, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159) or pick the connectors with your fingers and gently unplug them in direction of the arrow.

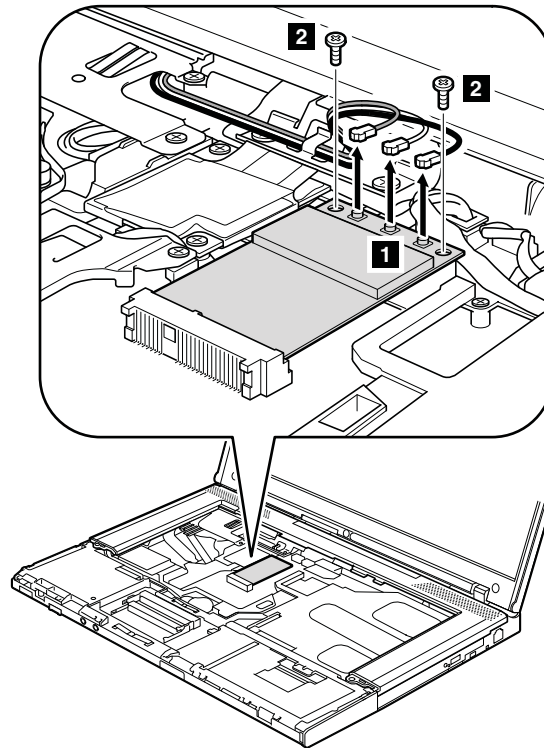
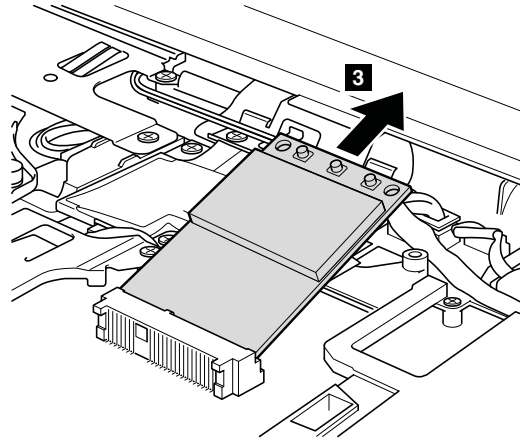
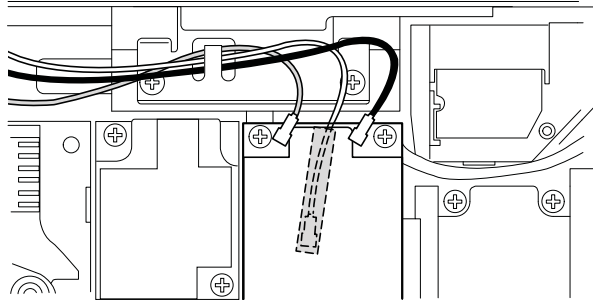
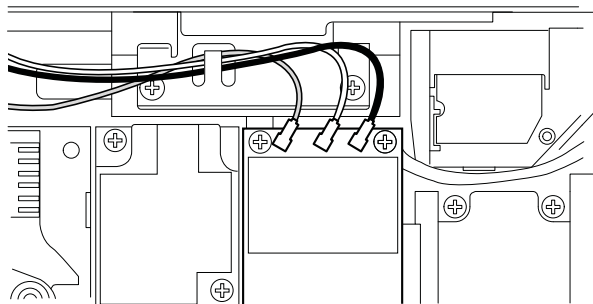
Note: Some models might have only two antenna cables in step **1**.

Step	Screw (quantity)	Color	Torque
2	M2 × 9.5 mm, wafer-head, nylon-coated (2)	Black	0.189 Nm (1.85 kgfcm)

Table 17. Removal steps of PCI Express Mini Card for wireless LAN/WiMAX (continued)

When installing:

- In models with wireless LAN card that has two antenna connectors, plug the gray cable into the jack labeled **MAIN** or **M**, and the black cable into the jack labeled **AUX** or **A** on the card. If the computer you are servicing has three cables, put the white cable in the cable holder and place it under the card.

- In models with wireless LAN card that has three antenna connectors, plug the gray cable (MAIN) into the jack labeled **TR1**, the white cable (3rd) into jack labeled **RO** or **TR3**, and the black cable (AUX) into jack labeled **TR2** on the card.

1090 Intel Turbo Memory Minicard or Wireless USB adapter

For access, remove these FRUs in order:

- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92

Table 18. Removal steps of Intel Turbo Memory Minicard or Wireless USB adapter

Note: Step **1** is only for the models with the Wireless USB adapter. For the models with the Intel® Turbo Memory Minicard, skip step **1**.

In step **1**, unplug the jack by using the removal tool antenna RF connector (P/N: 08K7159) or pick the connector with your fingers and gently unplug it in direction of the arrow.

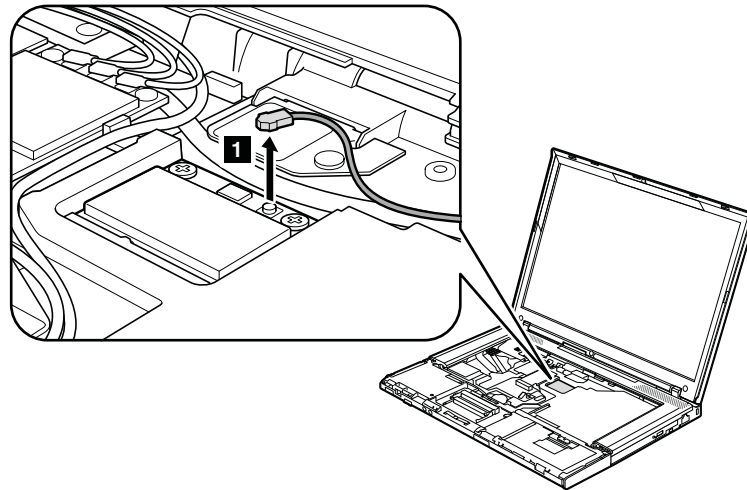
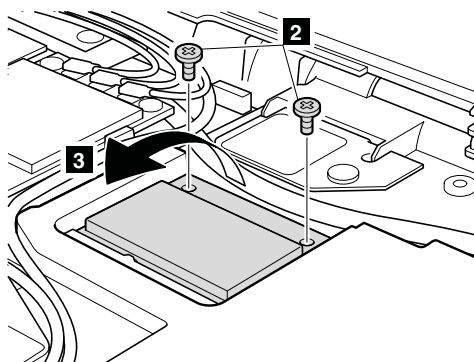
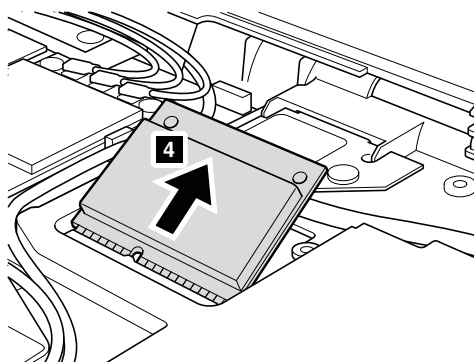
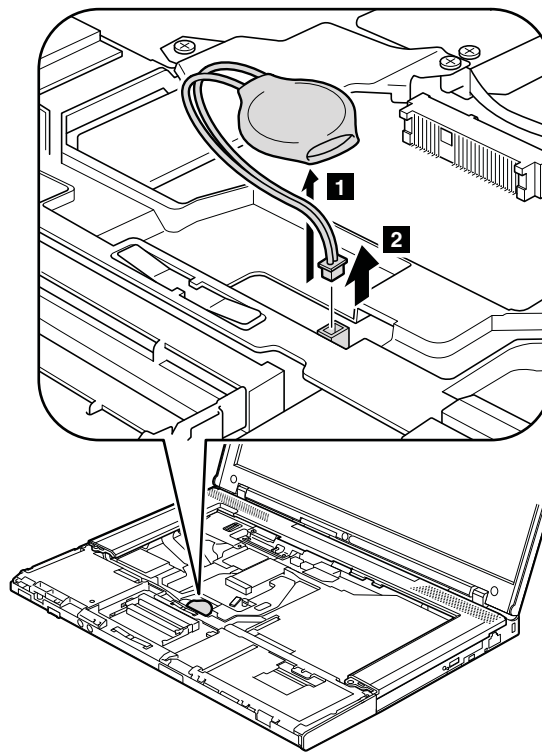



Table 18. Removal steps of Intel Turbo Memory Minicard or Wireless USB adapter (continued)

Step	Screw (quantity)	Color	Torque
2	For Japan		
	M2 × 3 mm, tamper proof (2)	Black	0.189 Nm (1.85 kgfcm)
	Other than Japan		
	M2 × 3 mm, wafer-head, nylon-coated (2)	Silver	0.189 Nm (1.85 kgfcm)

1100 Backup battery

DANGER

Use only the battery specified in the parts list for your computer. Any other battery could ignite or explode.

For access, remove these FRUs in order:
- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92

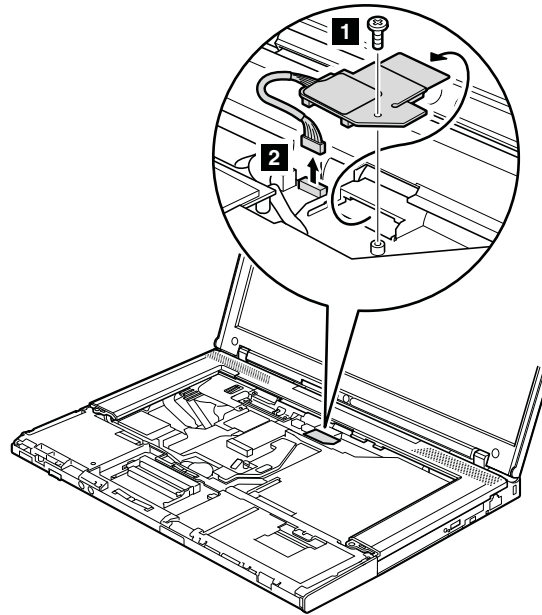
Table 19. Removal steps of backup battery

When installing: Make sure that the battery connector is attached firmly.

1110 SIM card slot

For access, remove these FRUs, in order:

- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92

Note: If the SIM card has been inserted in the slot, remove it before you start the servicing. After you finish the servicing, make sure that you insert the card back into the slot firmly.

Table 20. Removal steps of SIM card slot

Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, wafer-head, nylon-coated (1)	Silver	0.189 Nm (1.85 kgfcm)

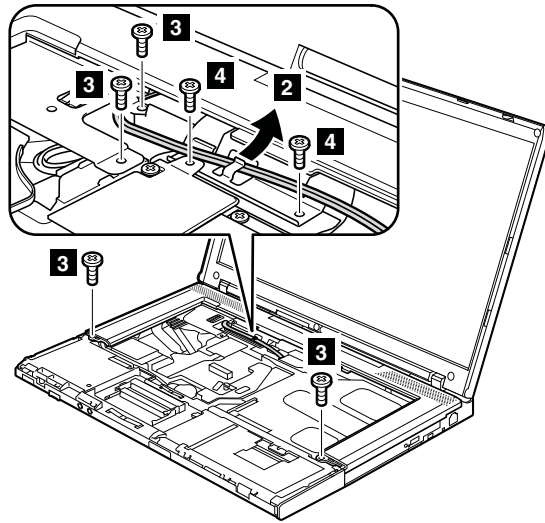
When installing: Make sure the connector 2 is attached firmly.

1120 Keyboard bezel

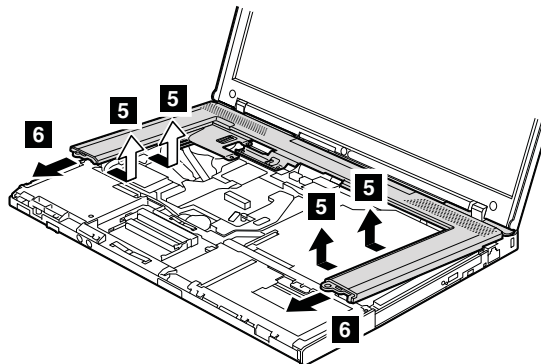
For access, remove these FRUs in order:

- "1010 Battery pack" on page 84
- "1040 Palm rest or palm rest with fingerprint reader" on page 88
- "1060 Keyboard" on page 92

Table 21. Removal steps of keyboard bezel

Step	Screw (quantity)	Color	Torque
1	M2 × 14 mm, wafer-head, nylon-coated (2)	Black	0.189 Nm (1.85 kgfcm)

In step **2**, release the wireless antenna cables from the cable guide.

Step	Screw (quantity)	Color	Torque
3	M2 × 3 mm, small-head, nylon-coated (4)	Silver	0.189 Nm (1.85 kgfcm)
4	M2 × 3.5 mm, wafer-head, nylon-coated (2)	Black	0.189 Nm (1.85 kgfcm)

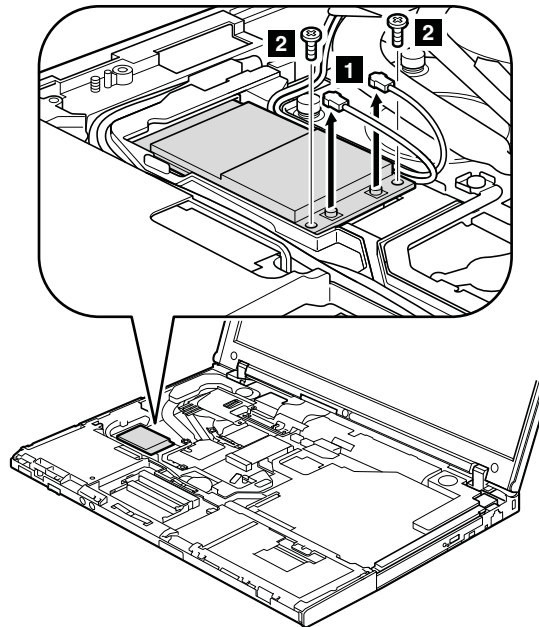
In step **5**, detach the claws. Then remove the keyboard bezel in the direction shown by arrow **6**.

When installing: Make sure that all the claws are attached firmly.

1130 PCI Express Mini Card for wireless WAN

For access, remove these FRUs in order:

- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92
- “1120 Keyboard bezel” on page 102

Table 22. Removal steps of PCI Express Mini Card for wireless WAN

In step **1**, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159) or pick the connectors with your fingers and gently unplug them in direction of the arrow.

Step	Screw (quantity)	Color	Torque
1	M2 × 3 mm, wafer-head, nylon-coated (1)	Silver	0.189 Nm (1.85 kgfcm)

When installing: Plug the red cable into the jack labeled **MAIN** on the card, and the blue cable into the jack labeled **AUX**.

Table 22. Removal steps of PCI Express Mini Card for wireless WAN (continued)

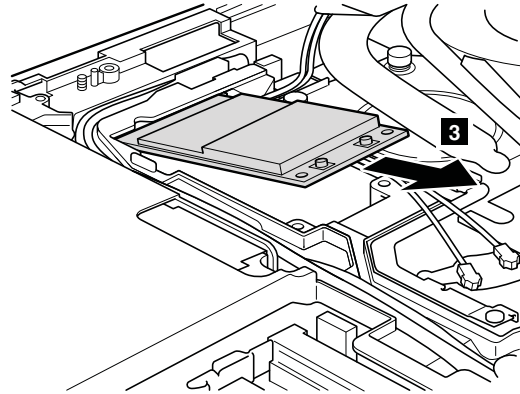
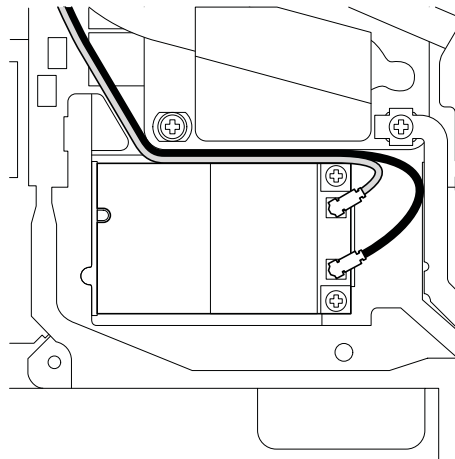
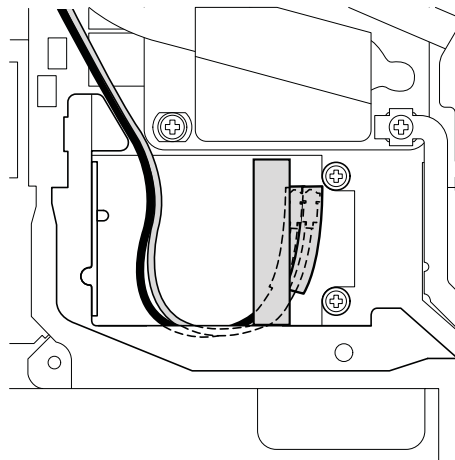
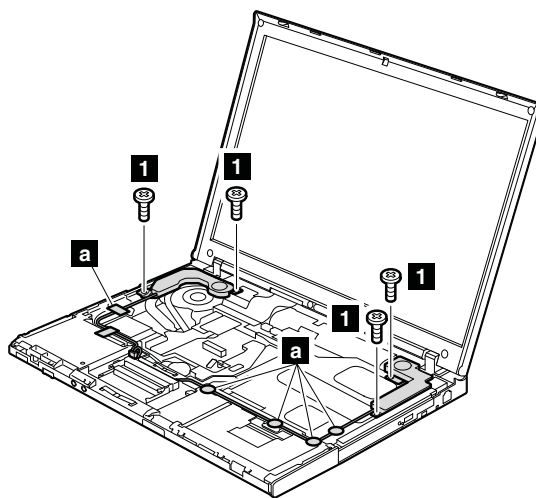



Table 23. Installation of the PCI Express Mini Card for wireless WAN

Cable routing: When you install the card, route the antenna cables as shown in this figure.

If the computer you are servicing is the wireless WAN-ready model, put the cables in the cable holders and secure them with tape as shown in this figure.

1140 Speaker assembly

For access, remove these FRUs in order:
- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92
- “1120 Keyboard bezel” on page 102

Table 24. Removal steps of speaker assembly

The speaker cables are secured with tapes (**a**).

Step	Screw (quantity)	Color	Torque
1	M2 × 3 mm, small-head, nylon-coated (4)	Silver	0.189 Nm (1.85 kgfcm)

In step **2** , release the antenna cable from the cable guide of the left speaker.

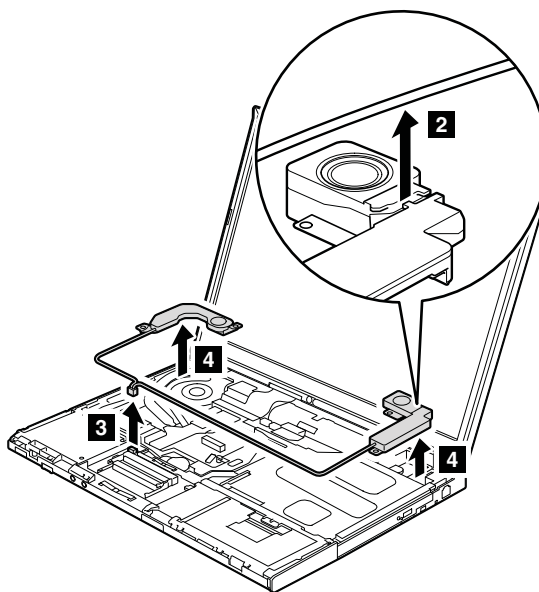
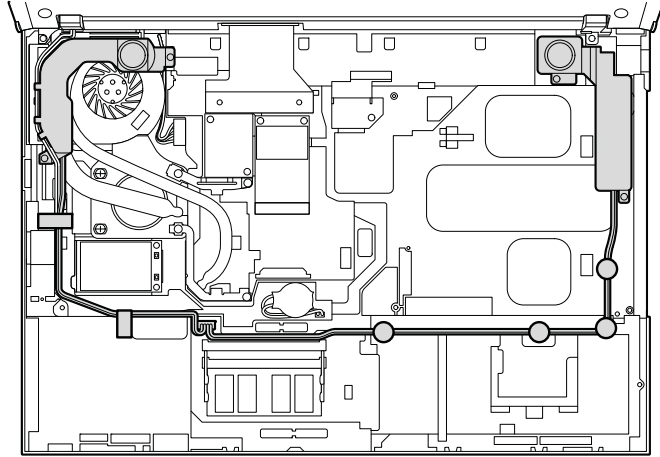
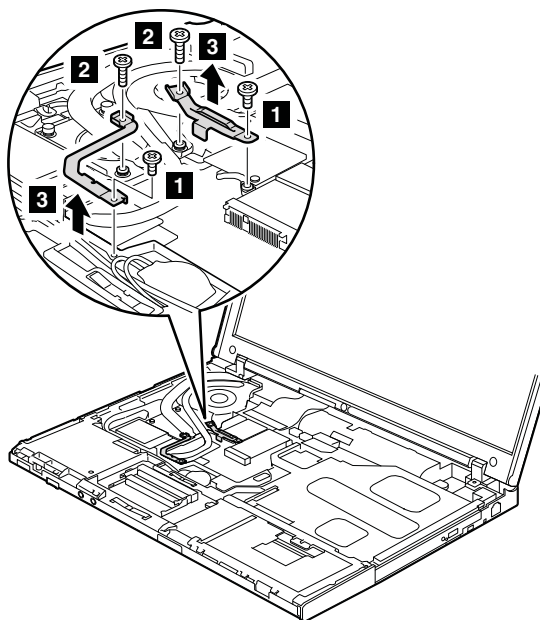



Table 24. Removal steps of speaker assembly (continued)

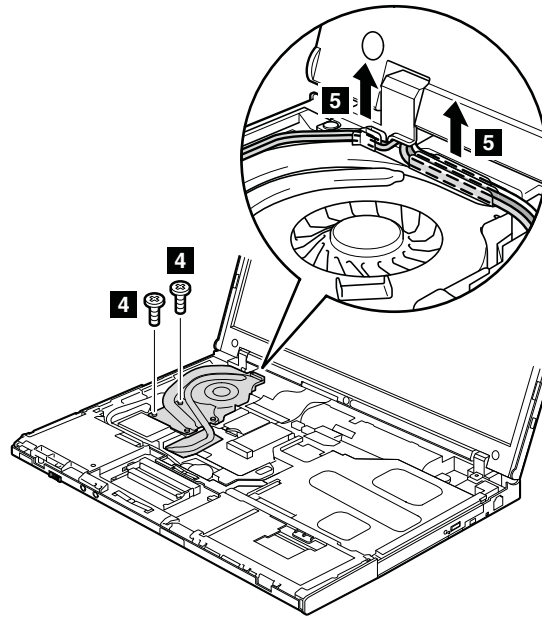
Cable routing: Make sure that the speaker connector is attached firmly, and the cables are routed as in this figure.

1150 Fan assembly

For access, remove these FRUs in order:

- "1010 Battery pack" on page 84
- "1040 Palm rest or palm rest with fingerprint reader" on page 88
- "1060 Keyboard" on page 92
- "1120 Keyboard bezel" on page 102
- "1140 Speaker assembly" on page 106

Table 25. Removal steps of fan assembly

Step	Screw (quantity)	Color	Torque
1	M2 × 3 mm, small-head, nylon-coated (2)	Silver	0.189 Nm (1.85 kgfcm)
2	M2 × 9.5 mm, wafer-head, nylon-coated (2)	Black	0.189 Nm (1.85 kgfcm)

Attention: Do not handle the fan roughly. Improper handling of the fan can cause distortion or deformation and imperfect contact with components.

Table 25. Removal steps of fan assembly (continued)

Step	Screw (quantity)	Color	Torque
4	M2 × 9.5 mm, wafer-head, nylon-coated (2)	Silver	0.189 Nm (1.85 kgfcm)

In step 5, release the wireless antenna cables from the cable guide of the fan assembly.

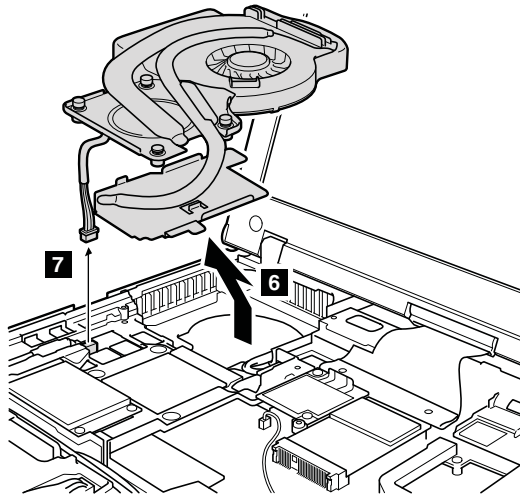



Table 26. Installation of the fan assembly

When installing:

- Before you attach the fan assembly to the computer, apply thermal grease, at an amount of 0.2 grams, on the part marked **a** as in the following figure. Either too much or too less application of grease can cause a thermal problem due to imperfect contact with a component. In some modes, you need to peel the thin film off from the rubber **b**.

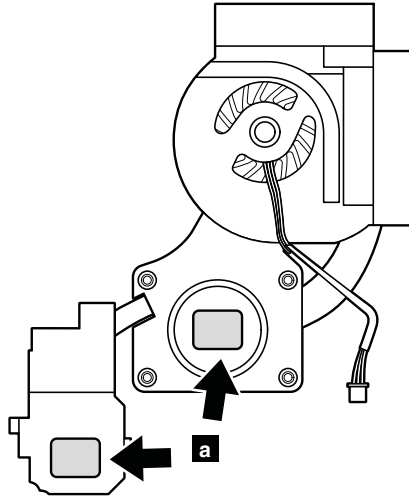
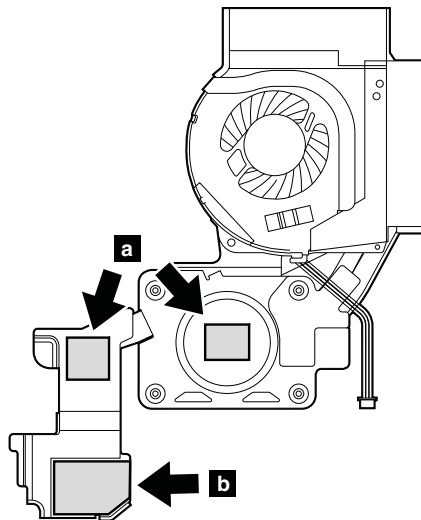
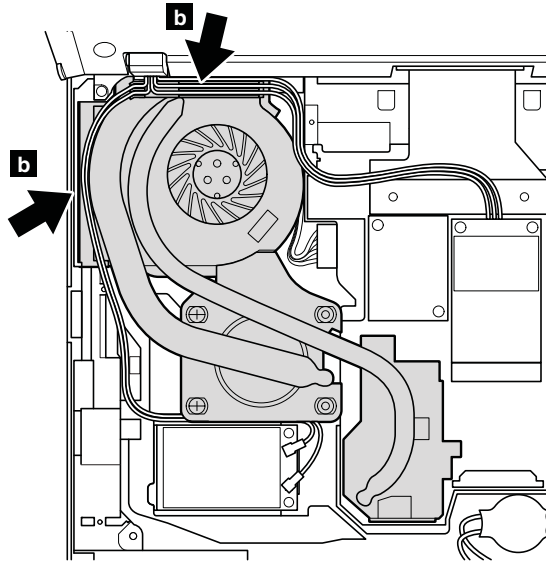
For the integrated graphics models:

For the switchable graphics models:

- Make sure that the fan connector is attached firmly.

Table 26. Installation of the fan assembly (continued)

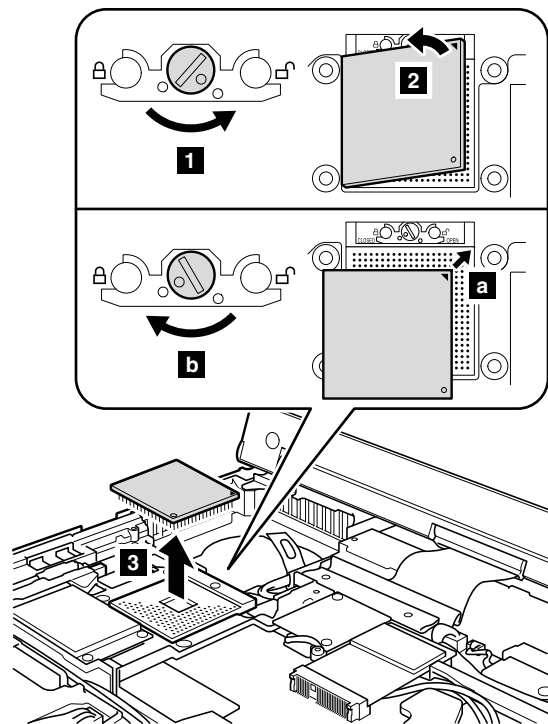
- When attaching the fan assembly to the frame, take care not to damage the heat sink and the cable guides (**b**) of the fan assembly.

1160 CPU

For access, remove these FRUs in order:

- "1010 Battery pack" on page 84
- "1040 Palm rest or palm rest with fingerprint reader" on page 88
- "1060 Keyboard" on page 92
- "1120 Keyboard bezel" on page 102
- "1140 Speaker assembly" on page 106
- "1150 Fan assembly" on page 108

Attention: CPU is extremely sensitive. When you service the CPU, avoid any kind of rough handling.

Table 27. Removal steps of CPU

Rotate the head of the screw in the direction shown by arrow **1** to release the lock; then remove the CPU.

When installing: Place the CPU on the CPU socket **a**, and then rotate the head of the screw in the direction shown by arrow **b** to secure the CPU.

1170 LCD unit

For access, remove these FRUs in order:

- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92
- “1080 PCI Express Mini Card for wireless LAN/WiMAX” on page 96
- “1120 Keyboard bezel” on page 102
- “1130 PCI Express Mini Card for wireless WAN” on page 104

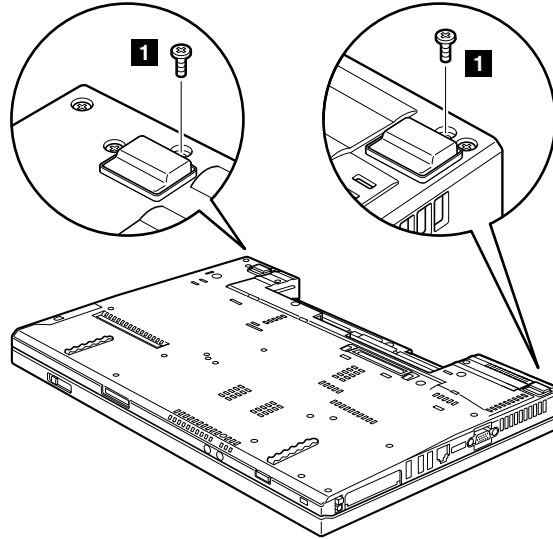
Table 28. Removal steps of LCD assembly

Step	Screw (quantity)	Color	Torque
1	M2.5 × 6.5 mm, wafer-head, nylon-coated (2)	Black	0.392 Nm (4 kgfcm)

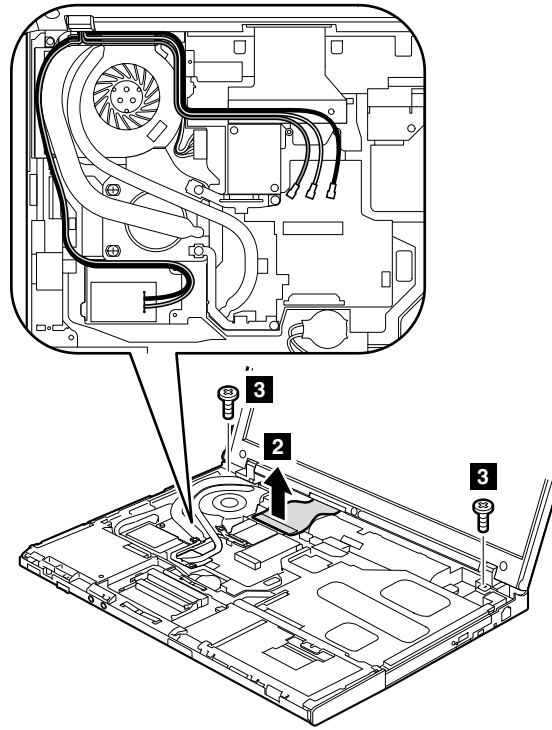
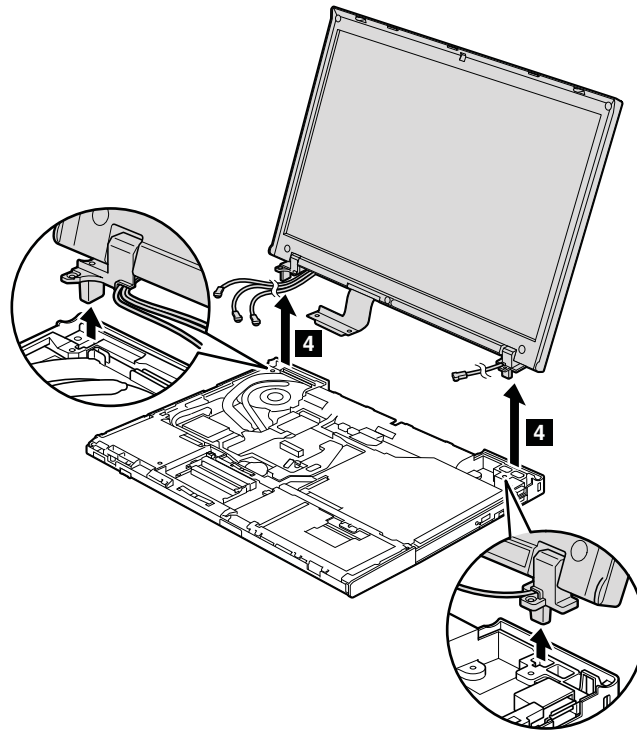
Table 28. Removal steps of LCD assembly (continued)

Step	Screw (quantity)	Color	Torque
3	M2.5 × 6.5 mm, wafer-head, nylon-coated (2)	Black	0.392 Nm (4 kgfcm)

Table 28. Removal steps of LCD assembly (continued)

When installing:

1. Route the antenna cables along the cable guides and secure them with the tapes. As you route the cables, make sure that they are not subjected to any tension. Tension could cause the cables to be damaged by the cable guides, or a wire to be broken.
2. Make sure that the LCD connector is attached firmly.

1180 Base cover and USB sub card with cable

For access, remove these FRUs, in order:

- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92
- “1080 PCI Express Mini Card for wireless LAN/WiMAX” on page 96
- “1120 Keyboard bezel” on page 102
- “1130 PCI Express Mini Card for wireless WAN” on page 104
- “1170 LCD unit” on page 113

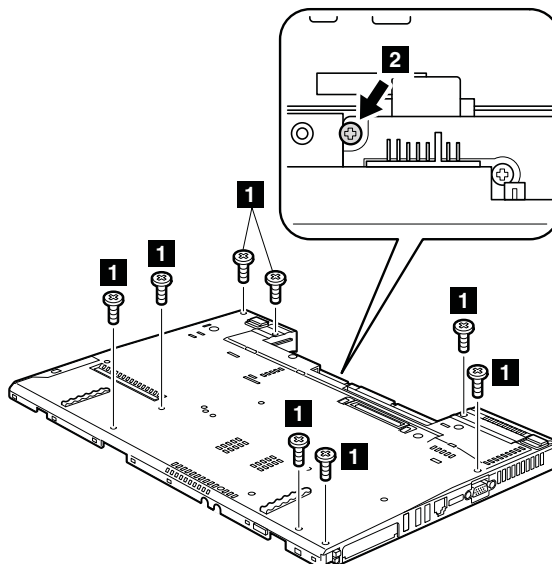
Table 29. Removal steps of base cover and USB sub card with cable

Step	Screw (quantity)	Color	Torque
1	M2 × 5 mm, wafer-head, nylon-coated (8)	Black	0.189 Nm (1.85 kgfcm)
2	M2 × 3.5 mm, wafer-head, nylon-coated (1)	Black	0.189 Nm (1.85 kgfcm)

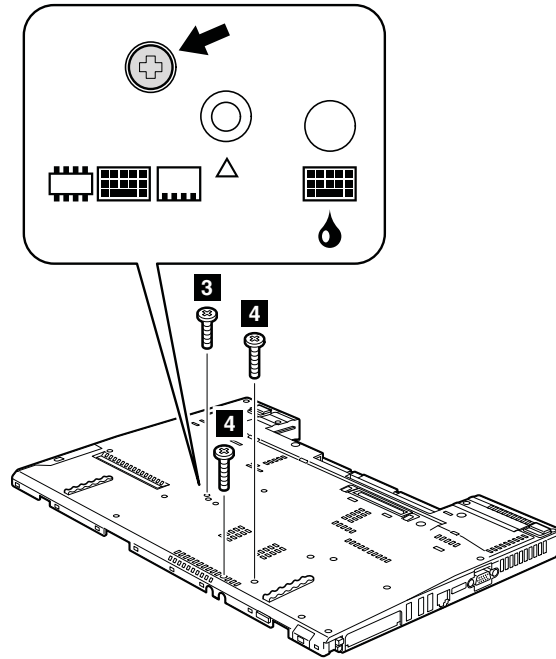
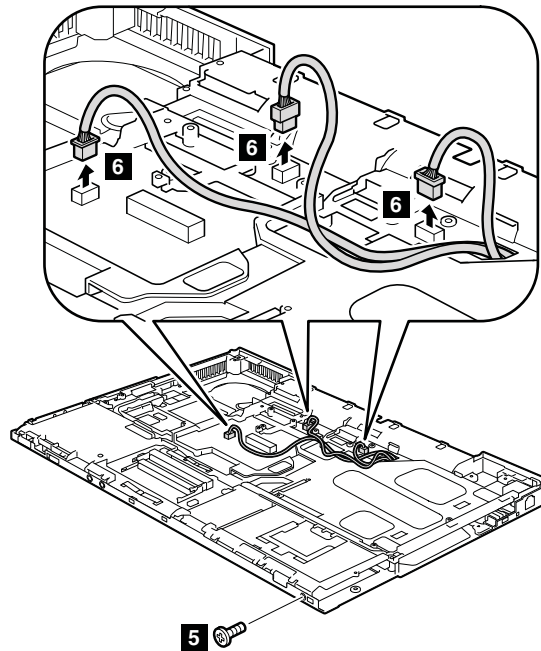
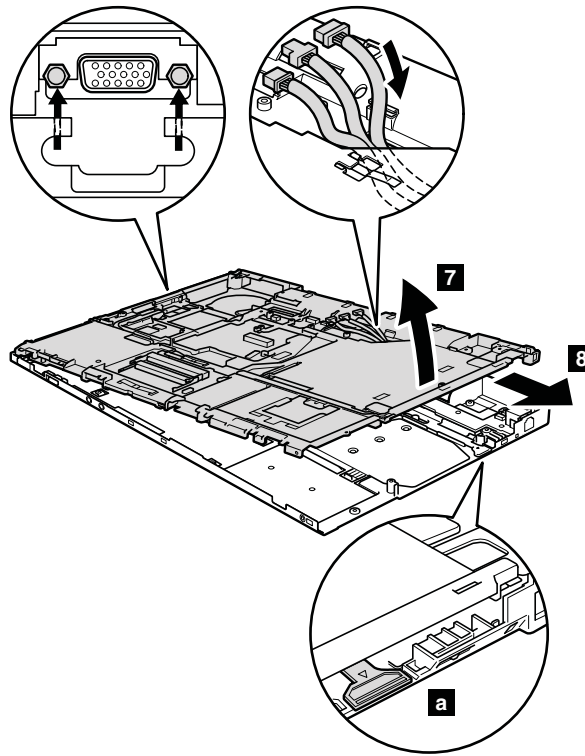
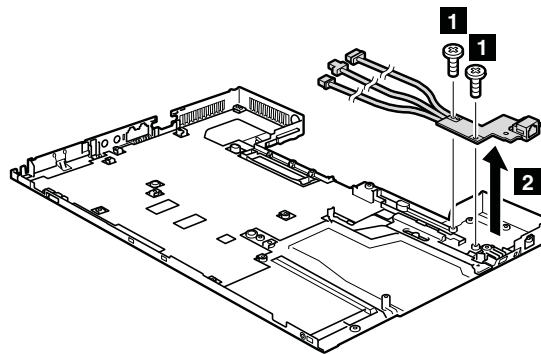
Table 29. Removal steps of base cover and USB sub card with cable (continued)

Step	Screw (quantity)	Color	Torque
3	M2 × 9.5 mm, wafer-head, nylon-coated (1)	Black	0.189 Nm (1.85 kgfcm)
4	M2 × 14 mm, wafer-head, nylon-coated (2)	Black	0.189 Nm (1.85 kgfcm)

Table 29. Removal steps of base cover and USB sub card with cable (continued)

Step	Screw (quantity)	Color	Torque
5	M2 × 3 mm, small-head, nylon-coated (1)	Silver	0.189 Nm (1.85 kgfcm)

When installing: Make sure that the connectors are attached firmly.

Table 29. Removal steps of base cover and USB sub card with cable (continued)

Attention: Before step **7**, be sure that the Serial Ultrabay Slim device eject lever has not popped out. It must be housed in its position as shown in the figure **a**.

Remove the USB sub card with cable as shown in this figure.

Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, wafer-head, nylon-coated (2)	Black	0.189 Nm (1.85 kgfcm)

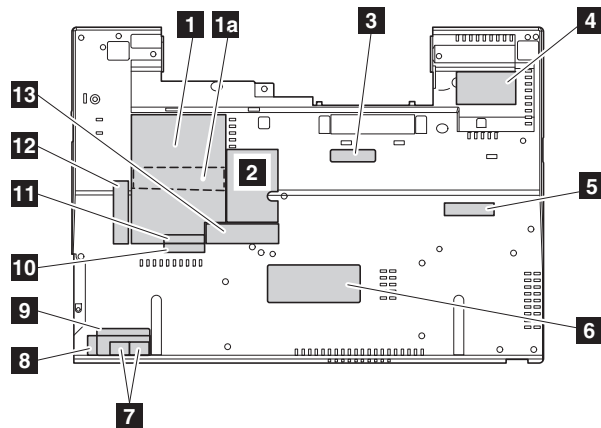
Note: Applying labels to the base cover
The new base cover FRU is shipped with a kit containing labels of several kinds. When you replace the base cover, you need to apply the following labels:

- **1** Product label
- **1a** Non-mercury label
  Note: If the computer you are servicing is an LED-backlight LCD model, you need to paste this label so that the notice for mercury on the product label is covered.
- **2** Homologation label

Following labels need to be peeled off from the old base cover, and need to be put on the new base cover.

- **3** Wireless LAN LMA label
- **4** SIM ICCID label
- **5** Windows license label (COA)
- **6** Wireless WAN LMA label
- **7** SIRM label
- **8** Israel label
- **9** China modem label
- **10** Wireless WAN IMEI label or wireless WAN ESN label
- **11** Wireless WAN MAC address label
- **12** MAC address label
- **13** Serial number label

For some models, you also need to apply one or two FCC labels. Check the old base cover; if it has one or two FCC labels, find duplicates of them in the label kit and apply them to the new base cover.

For the location of each label, refer the following figure:

1190 Structure frame

For access, remove these FRUs, in order:

- “1010 Battery pack” on page 84
- “1020 Serial Ultrabay Slim device” on page 85
- “1030 Hard disk drive (HDD) cover, HDD and HDD rubber rails or solid state drive (SSD) and storage converter” on page 86
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92
- “1070 Modem daughter card (MDC-3.0)” on page 94
- “1080 PCI Express Mini Card for wireless LAN/WiMAX” on page 96
- “1090 Intel Turbo Memory Minicard or Wireless USB adapter” on page 98
- “1120 Keyboard bezel” on page 102
- “1130 PCI Express Mini Card for wireless WAN” on page 104
- “1140 Speaker assembly” on page 106
- “1150 Fan assembly” on page 108
- “1170 LCD unit” on page 113
- “1180 Base cover and USB sub card with cable” on page 116

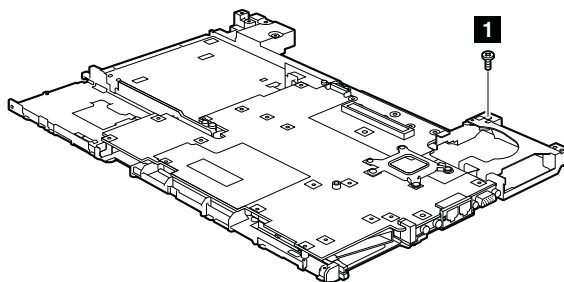
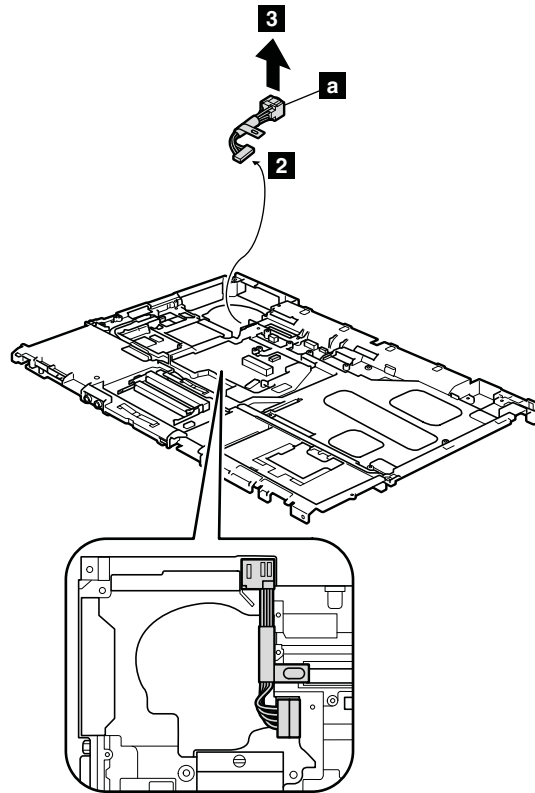
Table 30. Removal steps of structure frame

Step	Screw (quantity)	Color	Torque
1	M2 × 3 mm, wafer-head, nylon-coated (1)	Silver	0.189 Nm (1.85 kgfcm)

Table 30. Removal steps of structure frame (continued)

Remove the AC power jack cable **a**.

When installing: Make sure the connector is attached firmly, and that the cable is routed as in the figure above.

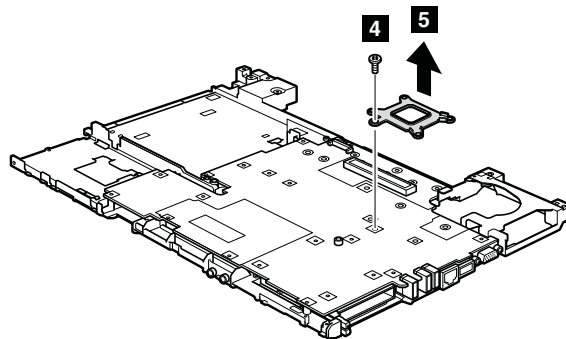
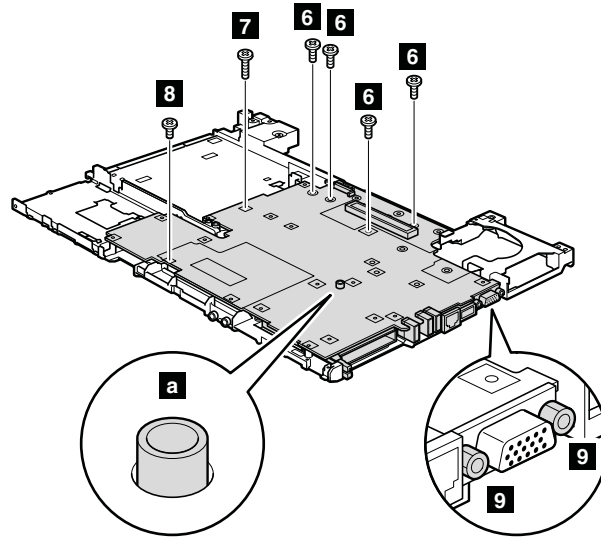
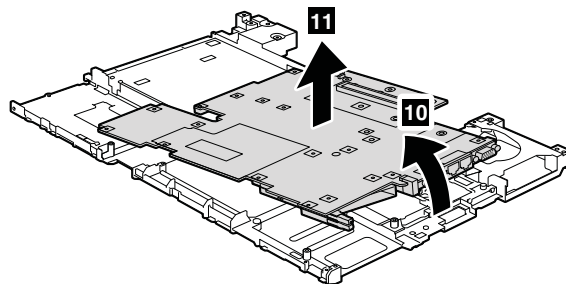
Remove the CPU support plate.

Step	Screw (quantity)	Color	Torque
4	M2 × 5 mm, wafer-head, nylon-coated (1)	Black	0.189 Nm (1.85 kgfcm)

Table 30. Removal steps of structure frame (continued)

Step	Screw (quantity)	Color	Torque
6	M2 × 3.5 mm, wafer-head, nylon-coated (4)	Black	0.189 Nm (1.85 kgfcm)
7	M2 × 9.5 mm, wafer-head, nylon-coated (1)	Black	0.189 Nm (1.85 kgfcm)
8	M2 × 3 mm, small-head, nylon-coated (1)	Silver	0.189 Nm (1.85 kgfcm)

In step 9, loosen the hex screws.

When installing: When attaching the system board to the frame, adjust the placement with the small projection a. Then secure the system board with the screws.

Remove the system board and the PC Card/ExpressCard slots assembly from the structure frame together.

1200 System board and ExpressCard slot assembly

Important notices for handling the system board:
When handling the system board, bear the following in mind.

- The system board has an accelerometer, which can be broken by applying several thousands of G-forces.

  Note: Dropping a system board from a height of as little as 6 inches so that it falls flat on a hard bench can subject the accelerometer to as much as 6,000 G's of shock.
- Be careful not to drop the system board on a bench top that has a hard surface, such as metal, wood, or composite.
- If a system board is dropped, you must test it, using PC-Doctor for DOS, to make sure that the HDD Active Protection still functions (see below).

  Note: If the test shows that HDD Active Protection is not functioning, be sure to document the drop in any reject report, and replace the system board.
- Avoid rough handling of any kind.
- At every point in the process, be sure not to drop or stack the system board.
- If you put a system board down, be sure to put it only on a padded surface such as an ESD mat or conductive corrugated material.

After replacing the system board, run PC-Doctor for DOS to make sure that HDD Active Protection still functions. The procedure is as follows:

1. Place the computer on a horizontal surface.
2. Run **Diagnostics** --> **ThinkPad Devices** --> **HDD Active Protection Test**.

   Attention:: Do not apply physical shock to the computer while the test is running.

For access, remove these FRUs, in order:

- “1010 Battery pack” on page 84
- “1020 Serial Ultrabay Slim device” on page 85
- “1030 Hard disk drive (HDD) cover, HDD and HDD rubber rails or solid state drive (SSD) and storage converter” on page 86
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1050 DIMM” on page 91
- “1060 Keyboard” on page 92
- “1070 Modem daughter card (MDC-3.0)” on page 94
- “1080 PCI Express Mini Card for wireless LAN/WiMAX” on page 96
- “1090 Intel Turbo Memory Minicard or Wireless USB adapter” on page 98
- “1100 Backup battery” on page 100
- “1110 SIM card slot” on page 101
- “1120 Keyboard bezel” on page 102
- “1130 PCI Express Mini Card for wireless WAN” on page 104
- “1140 Speaker assembly” on page 106
- “1150 Fan assembly” on page 108
- “1160 CPU” on page 112
- “1170 LCD unit” on page 113
- “1180 Base cover and USB sub card with cable” on page 116
- “1190 Structure frame” on page 121

Following components soldered on the top side of the system board are extremely sensitive. When you service the system board, avoid any kind of rough handling.

a CPU
b Video chip
c MCH (Memory Controller Hub)
d Accelerometer chip for the HDD Active Protection System™
e ICH (I/O Controller Hub)

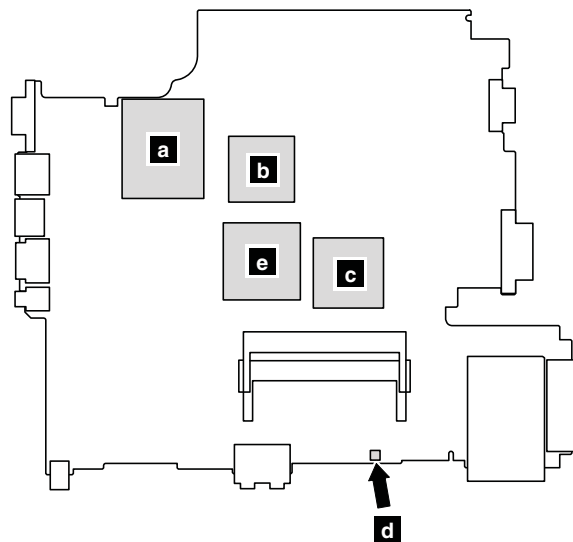
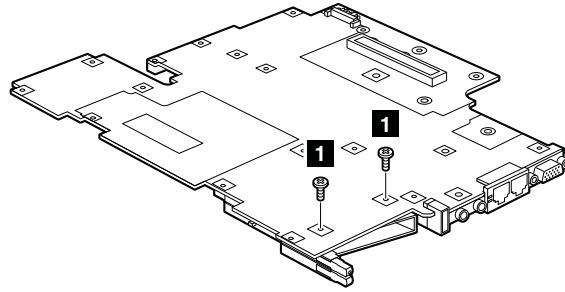
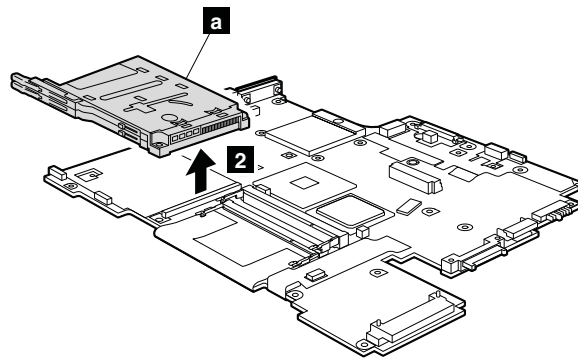



Table 31. Removal steps of system board and ExpressCard slot assembly

Step	Screw (quantity)	Color	Torque
1	M2 × 2.7 mm, wafer-head, nylon-coated (2)	Black	0.189 Nm (1.85 kgfcm)

Turn the system board over, and then disconnect the ExpressCard slot assembly a from the system board.

When installing: Make sure that the connector of the Express Card slot assembly is attached to the system board firmly.

2010 LCD front bezel (LCD cover kit)

For access, remove this FRU:
- “1010 Battery pack” on page 84

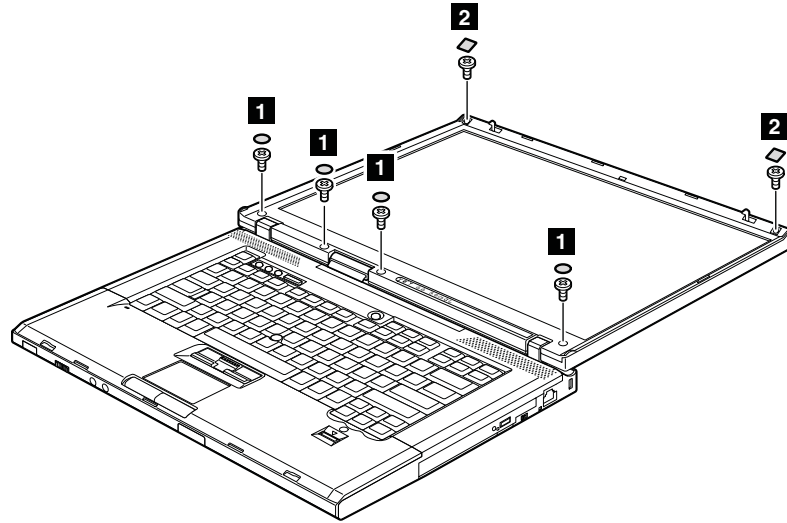
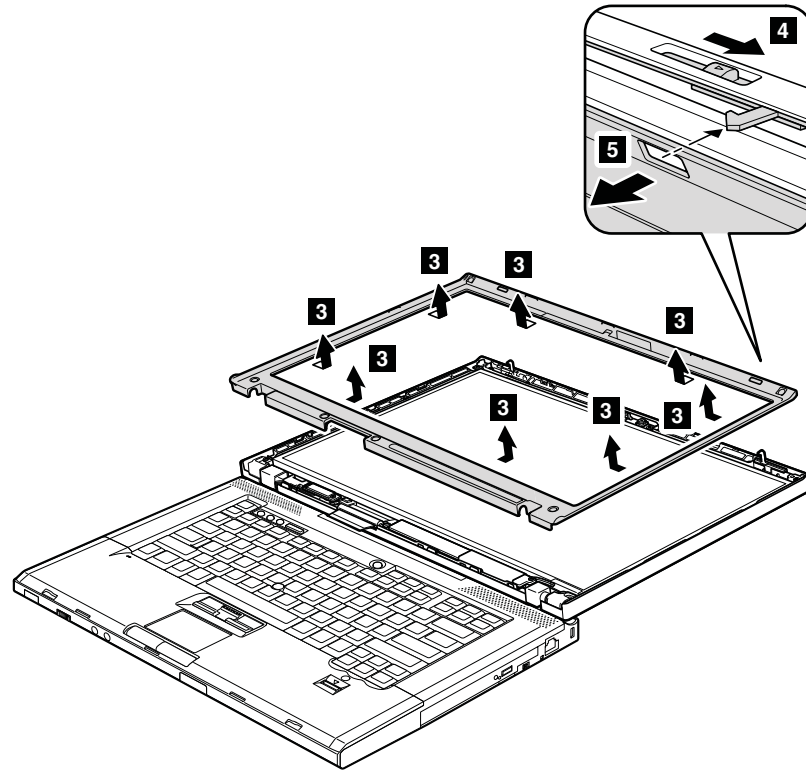
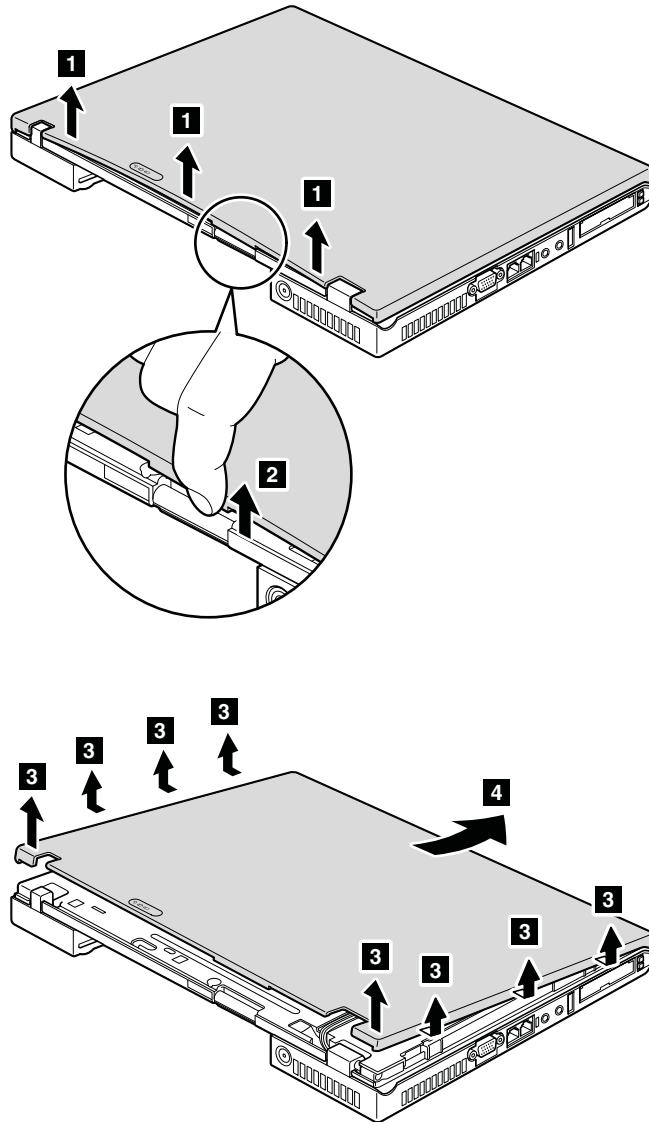
Table 32. Removal steps of LCD front bezel

Step	Screw cap	Screw (quantity)	Color	Torque
1	◯	M2.5 × 6.5 mm, bind-head, nylon-coated (3)	Black	0.392 Nm (4 kgfcm)
2	□	M2.5 × 6.5 mm, bind-head, nylon-coated (2)	Black	0.392 Nm (4 kgfcm)

Table 32. Removal steps of LCD front bezel (continued)

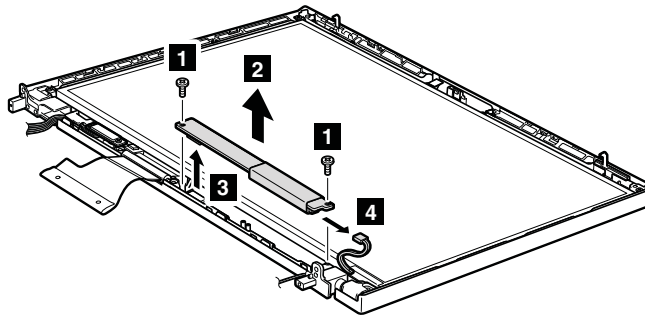
Close the LCD cover. Detach the LCD rear cover a little as shown in step **3** of this figure, and detach the rear edge of the LCD rear cover **4**.

2020 LCD rear cover (LCD cover kit)

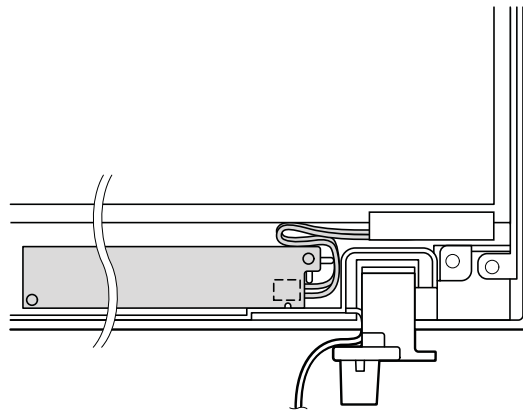
For access, remove these FRUs in order:
- “1010 Battery pack” on page 84
- “2010 LCD front bezel (LCD cover kit)” on page 127

Table 33. Removal steps of LCD rear cover

2030 Inverter card or LED control card

For access, remove these FRUs in order:

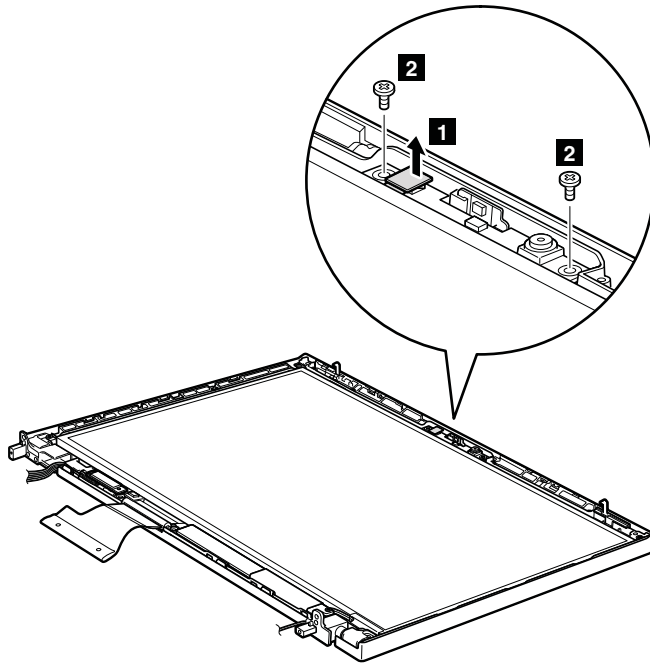
- “1010 Battery pack” on page 84
- “2010 LCD front bezel (LCD cover kit)” on page 127

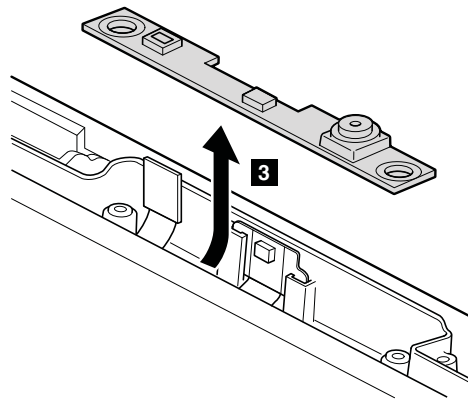
Table 34. Removal steps of inverter card or LED control card

Step	Screw (quantity)	Color	Torque
1	M2 × 2.8 mm, wafer-head, nylon-coated (2)	Silver	0.189 Nm (1.85 kgfcm)

Cable routing: When replacing the inverter card, route the connector cable as in this figure:

2040 Integrated camera

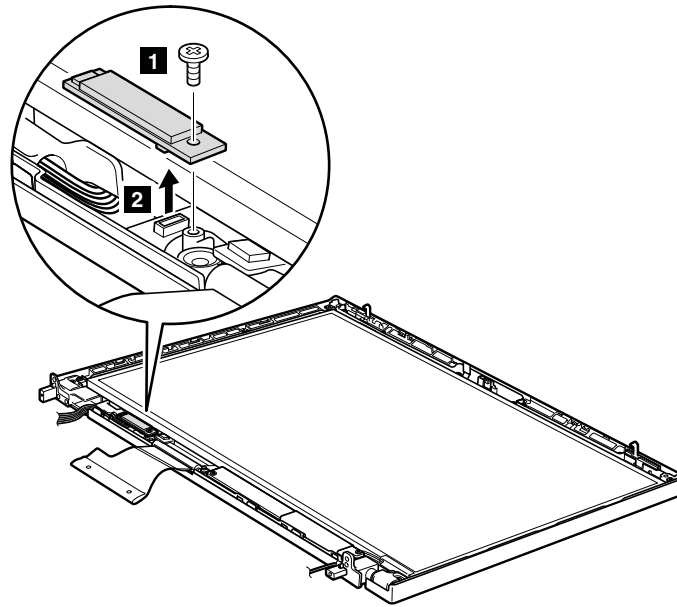
For access, remove these FRUs in order:

- “1010 Battery pack” on page 84
- “2010 LCD front bezel (LCD cover kit)” on page 127

Table 35. Removal steps of integrated camera

Step	Screw (quantity)	Color	Torque
1	M2 × 3.5 mm, wafer-head, nylon-coated (2)	Black	0.189 Nm (1.85 kgfcm)

Cable routing: When replacing the inverter card, route the connector cable as in this figure:

2050 *Bluetooth* daughter card (BDC-2.1)

For access, remove these FRUs in order:
- “1010 Battery pack” on page 84
- “2010 LCD front bezel (LCD cover kit)” on page 127

Table 36. Removal steps of BDC-2.1

Step	Screw (quantity)	Color	Torque
1	M2 × 2.8 mm, wafer-head, nylon-coated (1)	Silver	0.189 Nm (1.85 kgfcm)

When installing: Make sure that connector is attached firmly.

2060 Antenna assembly

For access, remove these FRUs in order:

- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92
- “1120 Keyboard bezel” on page 102
- “1130 PCI Express Mini Card for wireless WAN” on page 104
- “1170 LCD unit” on page 113
- “2010 LCD front bezel (LCD cover kit)” on page 127
- “2020 LCD rear cover (LCD cover kit)” on page 129

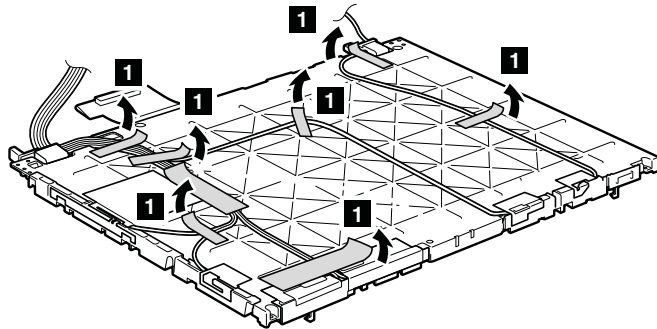
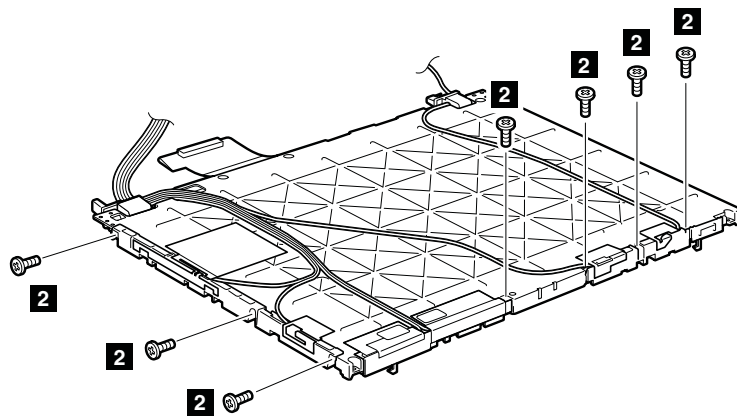
Table 37. Removal steps of antenna assembly

When installing: As you route the cables, make sure that they are not subjected to any tension. Tension could cause the cables to be damaged by the cable guides, or a wire to be broken.

Step	Screw (quantity)	Color	Torque
2	M2 × 3.5 mm, small-head, nylon-coated (7)	Black	0.189 Nm (1.85 kgfcm)

Table 37. Removal steps of antenna assembly (continued)

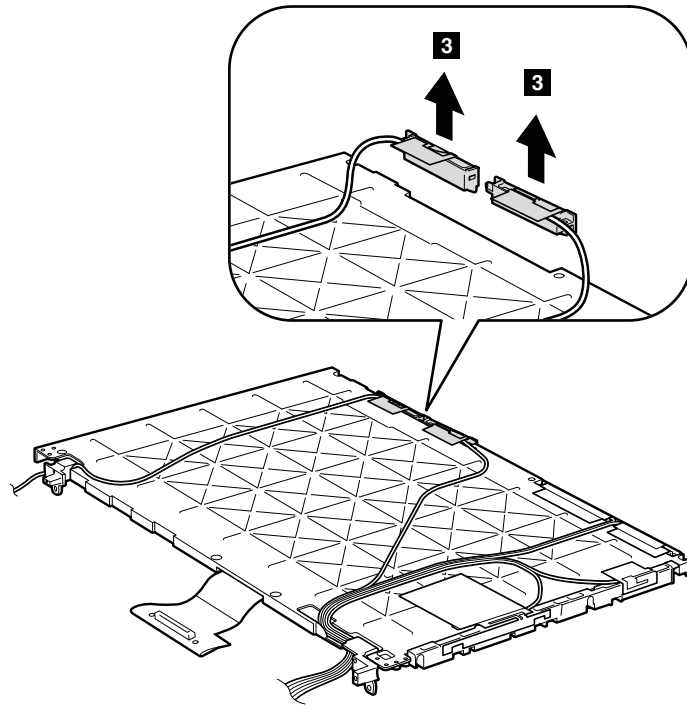
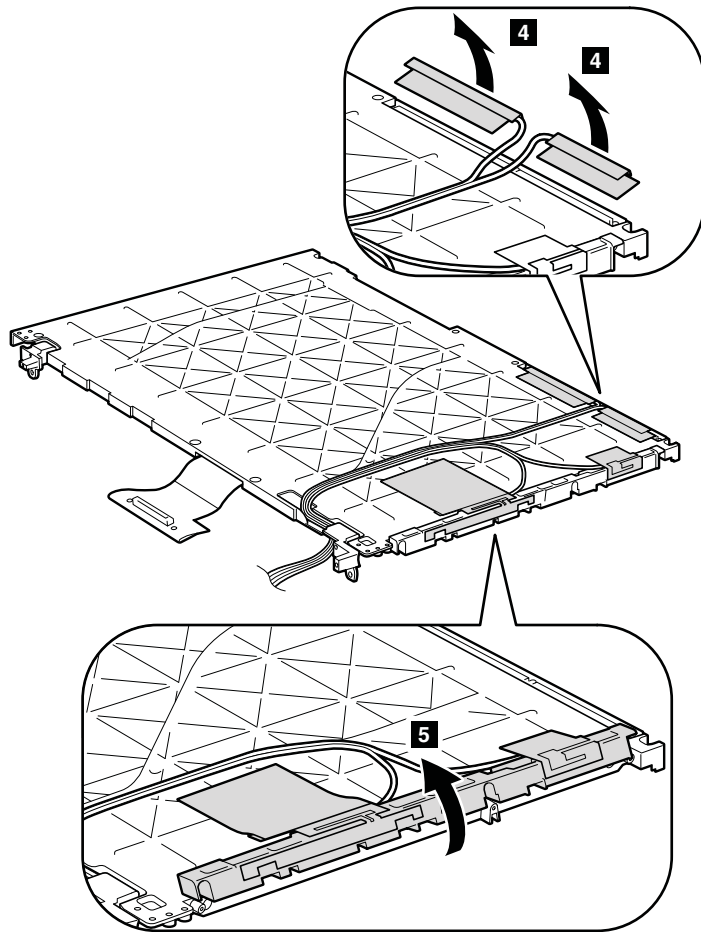



Table 37. Removal steps of antenna assembly (continued)

2070 LCD panel and LCD cable

For access, remove these FRUs in order:

- "1010 Battery pack" on page 84
- "1040 Palm rest or palm rest with fingerprint reader" on page 88
- "1060 Keyboard" on page 92
- "1080 PCI Express Mini Card for wireless LAN/WiMAX" on page 96
- "1120 Keyboard bezel" on page 102
- "1130 PCI Express Mini Card for wireless WAN" on page 104
- "1170 LCD unit" on page 113
- "2010 LCD front bezel (LCD cover kit)" on page 127
- "2020 LCD rear cover (LCD cover kit)" on page 129
- "2030 Inverter card or LED control card" on page 130
- "2040 Integrated camera" on page 131
- "2050 ***Bluetooth*** daughter card (BDC-2.1)" on page 132
- "2060 Antenna assembly" on page 133

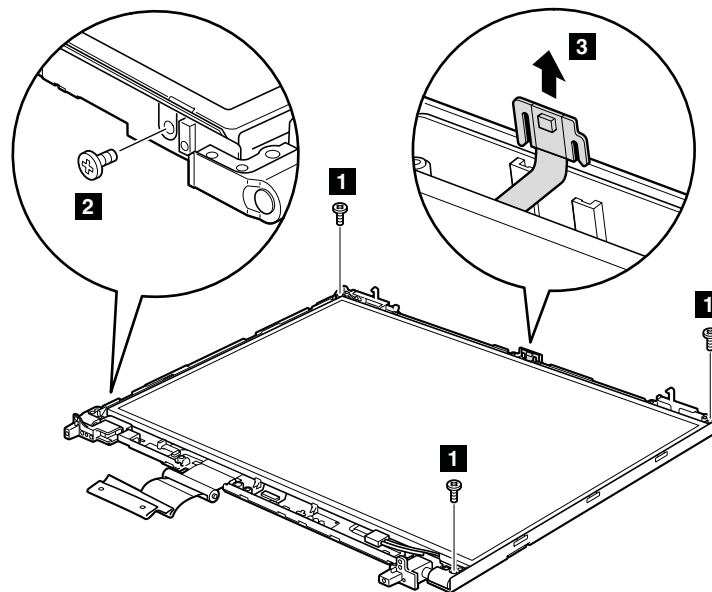
Table 38. Removal steps of LCD panel and LCD cable

Step	Screw (quantity)	Color	Torque
1	M2.5 × 6.5 mm, wafer-head, nylon-coated (3)	Black	0.392 Nm (4 kgfcm)
2	M2 × 2.8 mm, wafer-head, nylon-coated (1)	Silver	0.189 Nm (1.85 kgfcm)

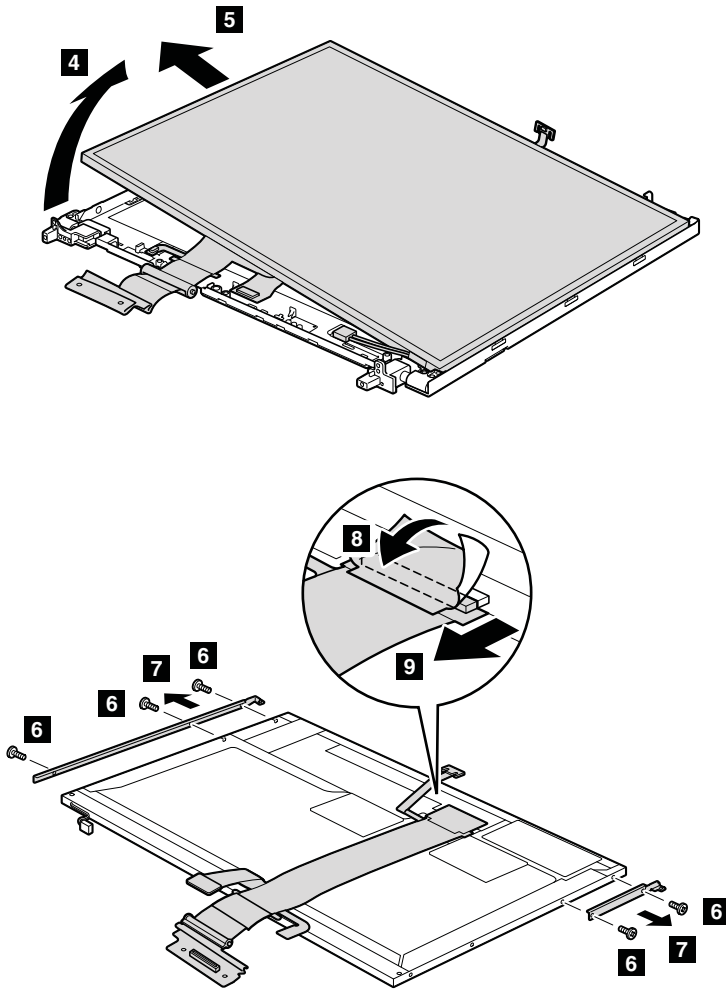
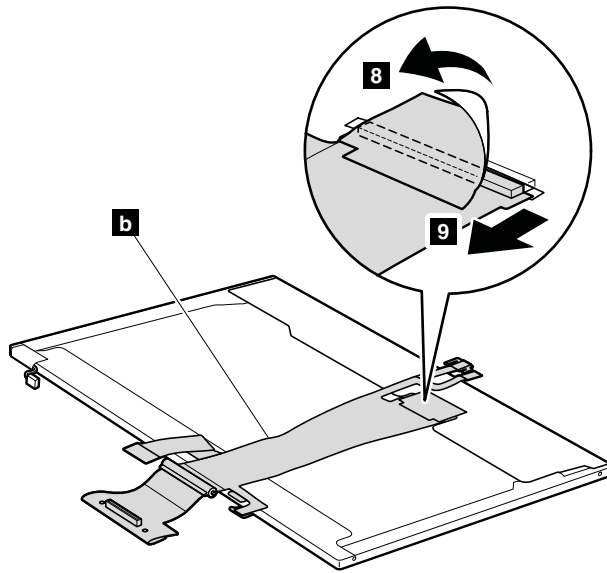
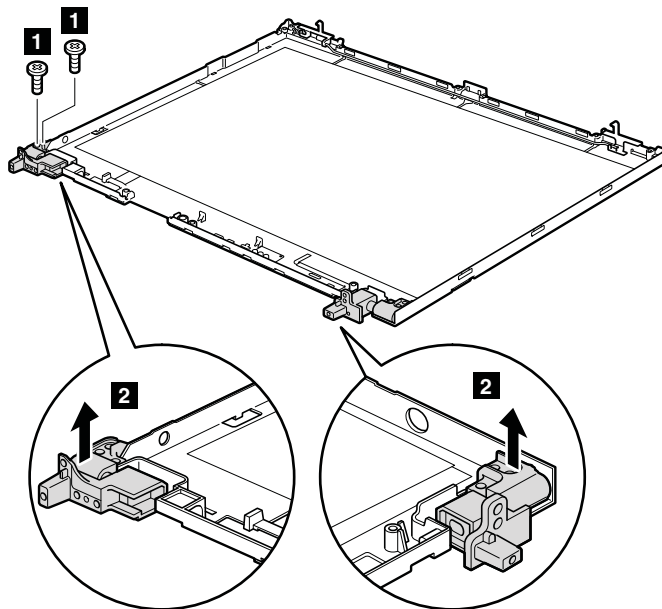
Table 38. Removal steps of LCD panel and LCD cable (continued)

Step	Screw (quantity)	Color	Torque
6	M2 × 2.8 mm, small-head, nylon-coated (5)	Silver	0.189 Nm (1.85 kgfcm)

Table 38. Removal steps of LCD panel and LCD cable (continued)

When installing: Make sure that the LCD cable is attached firmly.

2080 Hinges and LCD magnesium frame

For access, remove these FRUs in order:

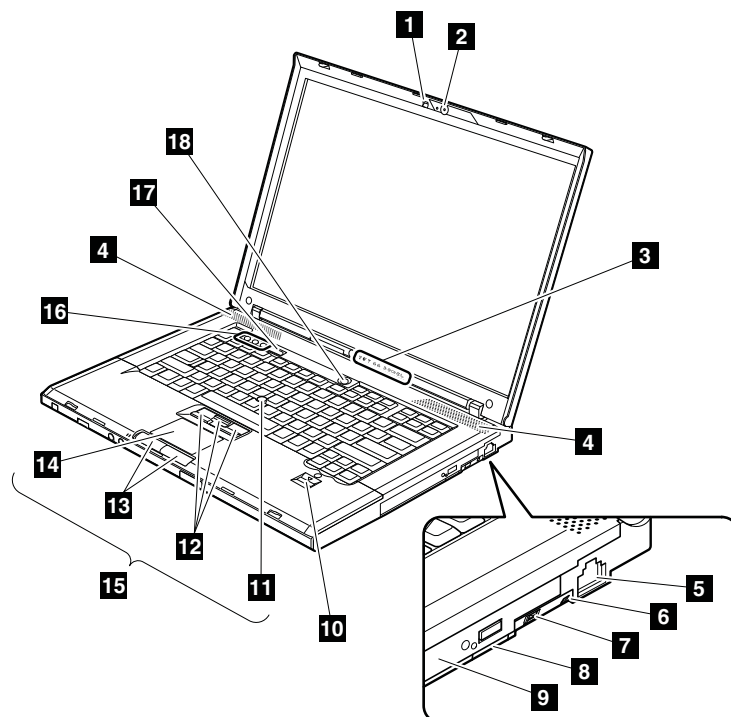
- “1010 Battery pack” on page 84
- “1040 Palm rest or palm rest with fingerprint reader” on page 88
- “1060 Keyboard” on page 92
- “1080 PCI Express Mini Card for wireless LAN/WiMAX” on page 96
- “1120 Keyboard bezel” on page 102
- “1130 PCI Express Mini Card for wireless WAN” on page 104
- “1170 LCD unit” on page 113
- “2010 LCD front bezel (LCD cover kit)” on page 127
- “2020 LCD rear cover (LCD cover kit)” on page 129
- “2030 Inverter card or LED control card” on page 130
- “2040 Integrated camera” on page 131
- “2050 ***Bluetooth*** daughter card (BDC-2.1)” on page 132
- “2060 Antenna assembly” on page 133
- “2070 LCD panel and LCD cable” on page 136

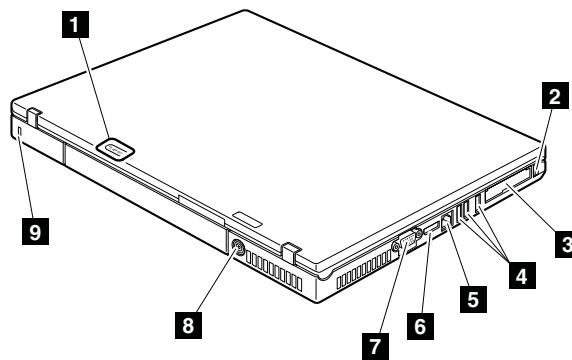
Table 39. Removal steps of hinges

Step	Screw (quantity)	Color	Torque
1	M2.5 × 6.5 mm, wafer-head, nylon-coated (2)	Black	0.392 Nm (4.0 kgfcm)

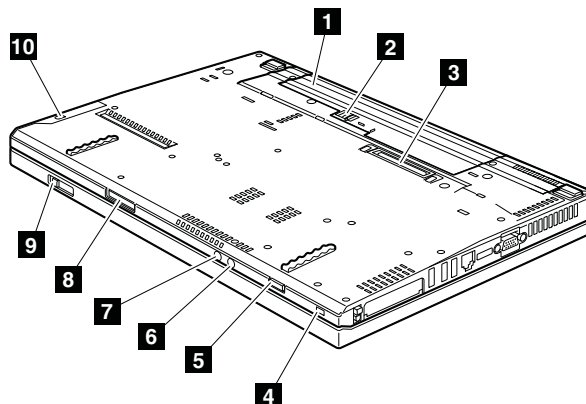
Locations

This chapter presents the location of ThinkPad T500 and W500 features and hardware.

Front view

1	ThinkLight
2	Integrated camera (for some models)
3	Status indicators **Note:** For the description of each indicator, see "Status indicators" on page 71.
4	Stereo speakers
5	RJ-11 (modem) connector
6	Serial Ultrabay Slim status indicator
7	Serial Ultrabay Slim latch
8	Serial Ultrabay Slim device eject lever
9	Serial Ultrabay Slim
10	Fingerprint reader (for some models)
11	TrackPoint pointing stick
12	TrackPoint buttons
13	Touch pad buttons
14	Touch pad
15	UltraNav
16	ThinkVantage button
17	Volume control buttons
18	Power switch

Rear view

1	Status indicators **Note:** For the description of each indicator, see "Status indicators" on page 71.
2	PC Card/ExpressCard slots or PC Card/Smart Card eject buttons
3	PC Card/ExpressCard slots or PC Card/Smart Card slots
4	USB (Universal serial bus) connectors
5	RJ-45 (Ethernet) connector
6	Display port
7	External monitor connector
8	AC power connector
9	Security key hole

Bottom view

1	Battery pack
2	Battery pack latch
3	Docking connector
4	IEEE 1394 connector
5	Wireless radio switch
6	Stereo headphone jack
7	Microphone jack
8	7–in-1 media card reader
9	LCD cover latch
10	Hard disk drive or solid state drive

Parts list

This chapter contains following lists of the service parts.

Notes:
- Each FRU is available for all types or models, unless specific types or models are specified.
- FRU with specific models listed and described as xxU (where U is an example of a country designator) should be used for all models ending in U.
- FRU with specific models listed and described as 3Dx (where 3D is an example of a unique configuration) should be used for all of these models, unless specific country or region designator is specified.
- A CRU (customer replaceable unit) is identified by a single asterisk (*) or two asterisks (**) in the CRU ID column. An N in the CRU ID column means that the part is not a CRU. A single asterisk (*) means that the part is a Self-service CRU; two asterisks (**) means that the part is an Optional-service CRU.

  ThinkPad Notebooks contain the following types of CRUs:

  Self-service CRUs
  These CRUs unplug or are held by no more than two screws. Examples of these types of CRUs include an AC adapter, a power cord, a battery, and a hard disk drive. Other Self-service CRUs depending on product design may include a memory, a wireless card, a keyboard, and a palm rest with finger print reader and touchpad.

  Optional-service CRUs
  These CRUs are isolated parts within the computer that are concealed by an access panel that is typically secured by more than two screws. Once the access panel is removed, the specific CRU is visible.
- FRUs marked with **OP** are available as options.

Overall

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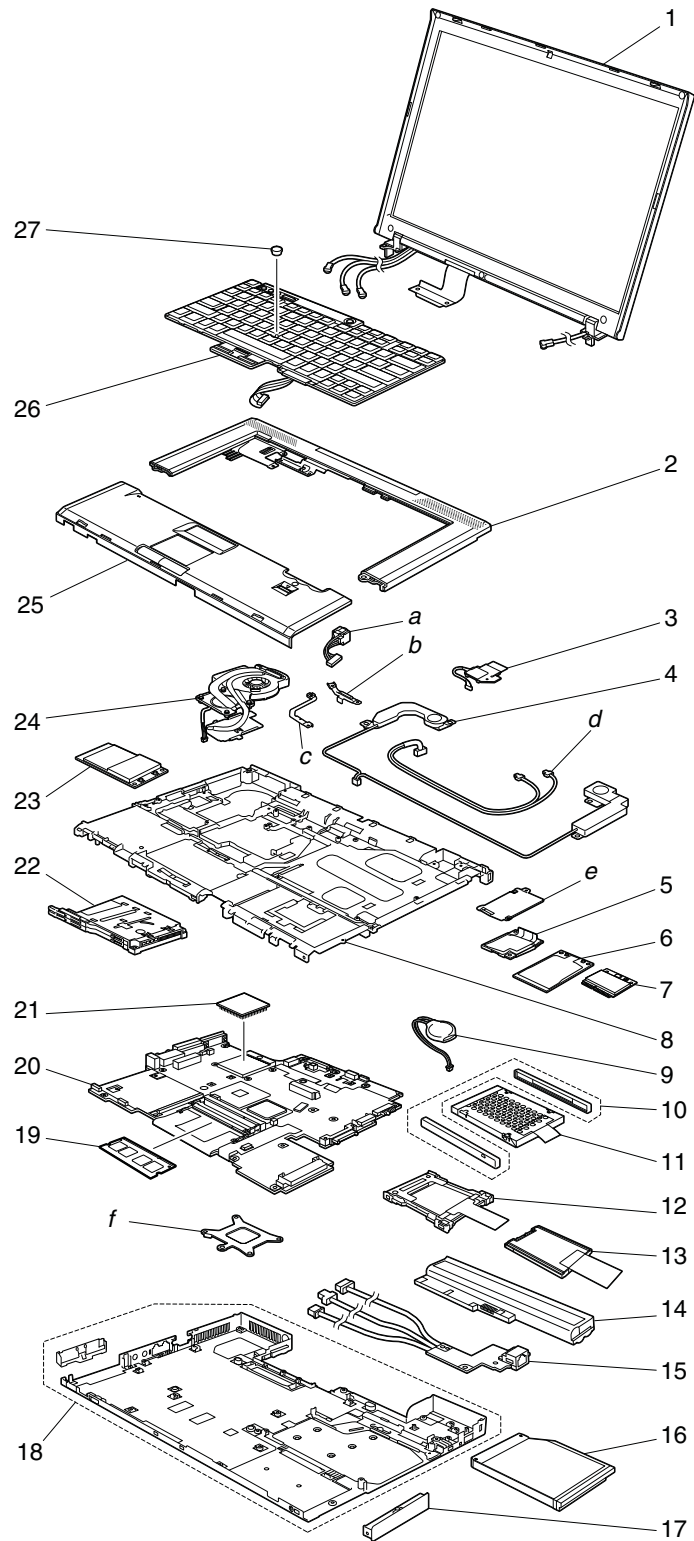
Table 40. Parts list—Overall

No.	FRU	FRU no.	CRU ID
a - d	See "Miscellaneous parts" on page 239.		
1	LCD unit (see "LCD FRUs" on page 219.)		
2	Keyboard bezel assembly	45N5499	N
3	SIM card slot	42X3919	N
4	Speaker assembly	42W3803	N
4	Speaker assembly	39T7492	N
5	Modem daughter card (MDC-3.0)	43Y6463	**
6	ThinkPad 11b/g Wireless LAN Mini PCI Express Adapter III • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 3Lx • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	43Y6511	**
6	ThinkPad 11b/g/n Wireless LAN Mini-PCI Express Adapter II • 2055-CTO, 9Ax, 9Bx, 9Cx, 9Dx, 9Sx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 83x • 2241-CTO • 2242-CTO, 8Px • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	43Y6553	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
6	ThinkPad 11b/g/n Wireless LAN Mini-PCI Express Adapter II • 2055-CTO, 9Ax, 9Bx, 9Cx, 9Dx, 9Sx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 83x • 2241-CTO • 2242-CTO, 8Px • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	60Y3177	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
6	Intel WiFi Link 5100 • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Ex, 3Ax, 45x, 46x, 47x, 4Bx, 5Sx, 62x, 63x, 64x, 74x, 75x, 76x, 77x, 78x, 7Ex, 7Fx, 7Lx, 8Kx, 8Rx, 8Sx, 9Kx, 9Lx, 9Rx, 9Tx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, A6x, A7x, AHx, AJx, AKx, ALx, AMx, AVx, AXx, AYx, E1x, E2x, E3x • 2056-CTO, 34x, 4Kx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 63x, 79x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 9Mx • 2082-CTO, 26x, 27x, 3Gx, 3Hx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Xx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 7Dx, 7Vx, 7Xx, 7Yx, 7Zx, 82x, 83x, 84x, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ex, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx, BNx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Jx, 2Kx, 2Lx, 2Mx, 2Vx, 2Wx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Mx, 3Nx, 3Rx, 3Tx, 4Wx, 4Xx, 4Yx, 4Zx, 58x, 59x, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Kx, 6Lx, 6Nx, 6Px, 6Qx, 79x, 7Qx, 82x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Mx, 8Nx, E1x, E2x, E3x, E4x, E5x • 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Sx, 5Tx, 5Ux, 5Zx, E1x, E2x, E3x, E4x, E5x • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 55x, 5Fx, 5Gx, 5Hx, 5Vx, 66x, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Qx, 8Rx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 2Cx, 3Cx, 4Nx, 4Px, 4Tx, 4Ux, 56x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 7Zx • 4058-CTO • 4061-CTO, 2Zx, 49x, 4Px, 6Cx, 6Dx • 4062-CTO, 24x, 25x, 26x, 27x, 35x, 36x, 3Gx, 3Hx, 3Rx, 3Sx, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 54x, 55x, 56x, 57x, 58x, 5Dx, 5Ex, 5Fx, 5Gx, 5Qx, 5Rx, 5Sx, 5Tx • 4063-CTO, 33x • 4064-CTO • 4065-CTO	43Y6493	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
6	Intel WiFi Link 5300 • 2055-CTO, 2Lx, 2Mx, 2Nx, 2Px, 2Vx, 2Xx, 48x, 49x, 4Ax, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Rx, 5Tx, 5Ux, 5Vx, 5Wx, 65x, 7Gx, 7Hx, 7Jx, 7Kx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Tx, 8Ux, 9Ux, 9Vx, 9Wx, 9Xx, A8x, A9x, ANx, APx, AQx, ARx, ASx, ATx, AUx, AWx, AZx, B2x, B3x, B4x, • 2056-CTO, 5Tx • 2081-CTO, 22x, 24x, 3Ex, 52x, 53x, 7Wx • 2082-CTO, 28x, 3Fx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Yx, 5Zx, 6Mx, 6Nx, 6Px, 6Qx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 85x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 9Fx, 9Gx, 9Hx, 9Jx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Hx, 2Qx, 2Rx, 2Sx, 2Ux, 3Px, 3Qx, 3Sx, 3Ux, 3Vx, 4Dx, 52x, 53x, 54x, 5Ax, 6Gx, 6Hx, 6Jx, 6Mx, 8Kx, 8Lx • 2241-CTO • 2242-CTO, 39x, 3Ax, 4Kx, 5Ex • 2243-CTO, 3Bx, 4Dx, 4Ex, 4Lx, 4Mx, 4Qx, 4Rx, 4Sx, 57x • 2246-CTO • 2247-CTO • 2261-CTO, 3Ex, 3Fx, 3Gx, 4Vx • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 4Ax, 4Bx, 4Qx, 4Rx, 4Ux, 4Vx, 4Wx, 4Zx, 52x, 53x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Xx, 2Yx, 37x, 3Ax, 3Bx, 3Cx, 3Jx, 3Kx, 3Mx, 3Nx, 3Px, 3Qx, 4Dx, 4Ex, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 59x, 5Cx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Tx, 2Ux, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	43Y6495	**
6	Intel WiMAX/WiFi Link 5350 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 6Bx, 72x • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	43Y6533	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
6	Intel WiMAX/WiFi Link 5150 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO		
	Japan	60Y3197	**
	Other than Japan	43Y6539	**
6	Intel WiFi Link 1000 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	60Y3203	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
7	Intel Turbo Memory Minicard, 2GB (half size) • 2055-CTO, 2Px, 2Nx, 3Ax, 48x, 49x, 4Ax, 4Ex, 4Fx, 4Gx, 4Hx, 5Rx, 5Vx, 5Wx, 77x, 78x, 7Jx, 8Cx, 8Dx, 8Nx, 8Px, 8Rx, 8Sx, 9Ax, 9Bx, 9Yx, 9Zx, A9x, AHx, ANx, APx, AQx, ARx, AUx • 2056-CTO, 4Sx, 7Cx • 2081-CTO, 52x, 7Wx • 2082-CTO, 3Fx, 3Gx, 3Jx, 3Kx, 5Px, 5Zx, 6Rx, 6Sx, 6Zx, 7Rx, 7Sx, 7Tx, 7Ux, 7Xx, 7Yx, 7Zx, 92x, 94x, 96x, 9Fx, 9Gx, 9Hx, 9Jx, BEx, BHx, BRx, BSx • 2083-CTO • 2087-CTO • 2088-CTO, 3Yx, 3Zx, 42x, 43x, 44x • 2089-CTO, 2Kx, 2Lx, 2Ux, 2Wx, 2Xx, 3Jx, 3Nx, 3Rx, 3Sx, 6Jx • 2241-CTO, 3Xx • 2242-CTO, 25x, 27x, 34x, 36x, 37x, 39x • 2243-CTO, 2Bx, 3Cx, 4Nx, 4Sx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 2Ex, 2Gx, 3Dx, 3Ex, 3Fx • 4058-CTO, 22x • 4061-CTO, 2Jx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Sx, 32x, 3Ex, 3Fx, 3Vx, 48x, 49x, 4Zx, 64x, 65x • 4062-CTO, 24x, 27x, 2Ax, 2Xx, 2Yx, 3Ax, 3Bx, 3Hx, 3Sx, 4Hx, 4Kx, 57x • 4063-CTO, 2Tx, 2Ux, 34x, 3Fx • 4064-CTO • 4065-CTO	43Y6523	**
7	Intel Turbo Memory Minicard, 4GB (half size) • 2055-CTO, 8Ax, 8Bx, 8Hx, 8Qx, 8Tx, ASx, ATx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO, 88x • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 42x, 46x, 4Ax, 4Bx, 66x, 67x, 68x, 69x, 6Hx • 4062-CTO, 3Qx • 4063-CTO • 4064-CTO • 4065-CTO	43Y6525	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
7	Wireless USB PCI Express Half-Mini Card • 2055-CTO, 2Dx, 2Vx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 24x • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO		
	US	43Y6501	**
	Japan	43Y6503	**
8	Structure frame	45N3831	N
9	Backup battery	02K6572	**
10	Hard disk drive rubber rails	41V9756	*
11	SATA hard disk drive, 80 GB, 9.5 mm, 5,400 rpm OP • 2055-CTO, 2Bx, 74x • 2056-CTO, 4Px, 79x • 2081-CTO • 2082-CTO • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Jx, 59x • 2241-CTO, 3Wx, 5Sx, • 2242-CTO • 2243-CTO • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	39T2885	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 80 GB, 9.5 mm, 5,400 rpm OP • 2055-CTO, 2Bx, 74x • 2056-CTO, 4Px, 79x • 2081-CTO • 2082-CTO • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Jx, 59x • 2241-CTO, 3Wx, 5Sx, • 2242-CTO • 2243-CTO • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T1491	**
11	SATA hard disk drive, 80 GB, 9.5 mm, 5,400 rpm • 2055-CTO, 2Bx, 74x • 2056-CTO, 4Px, 79x • 2081-CTO • 2082-CTO • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Jx, 59x • 2241-CTO, 3Wx, 5Sx, • 2242-CTO • 2243-CTO • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T1305	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 80 GB, 9.5 mm, 5,400 rpm • 2055-CTO, 2Bx, 74x • 2056-CTO, 4Px, 79x • 2081-CTO • 2082-CTO • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Jx, 59x • 2241-CTO, 3Wx, 5Sx, • 2242-CTO • 2243-CTO • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T1575	**
11	SATA hard disk drive, 160 GB, 9.5 mm, 5,400 rpm **OP** • 2055-CTO, 2Cx, 2Ex, 2Lx, 2Mx, 47x, 49x, 4Ax, 4Bx, 5Rx, 5Vx, 5Wx, 65x, 75x, 76x, 7Ex, 7Fx, 7Kx, 89x, 8Ux, 9Cx, 9Dx, 9Zx, A2x, A3x, A9x, ANx, APx, AQx, ARx, AUx • 2056-CTO, 34x, 4Kx, 4Qx, 7Ax • 2081-CTO • 2082-CTO, 3Nx, 52x, 53x, 57x, 58x, 5Ax, 5Bx, 5Ex, 5Fx, 5Kx, 5Mx, 5Rx, 5Xx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Vx, 6Wx, 6Yx, 73x, 85x • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Kx, 2Lx, 2Qx, 2Rx, 2Sx, 2Vx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Nx, 3Px, 3Rx, 3Sx, 3Tx, 4Dx, 4Xx, 4Yx, 4Zx, 52x, 53x, 58x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Kx, 6Lx, 6Nx, 6Px, 6Qx, 79x, 7Gx, 7Hx, 7Qx, 82x, 84x, 87x, 88x, 8Nx, E4x, E5x • 2241-CTO, 3Xx, 3Yx, 3Zx, 43x, 4Xx, 58x, 5Tx, 5Ux, 5Zx, E1x, E5x • 2242-CTO, 22x, 26x, 28x, 33x, 36x, 37x, 38x, 4Ex, 4Fx, 4Hx, 4Kx, 5Fx, 5Gx, 6Bx, 6Rx, 6Sx, 6Yx • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Qx, 4Ux, 56x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 67x, 68x, 6Xx, 76x, 77x, 93x, 94x, 95x, 96x, 9Fx, 9Gx • 2246-CTO • 2247-CTO • 2261-CTO, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO, 2Vx • 4065-CTO, 2Wx	39T2899	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 160 GB, 9.5 mm, 5,400 rpm OP • 2055-CTO, 2Cx, 2Ex, 2Lx, 2Mx, 47x, 49x, 4Ax, 4Bx, 5Rx, 5Vx, 5Wx, 65x, 75x, 76x, 7Ex, 7Fx, 7Kx, 89x, 8Ux, 9Cx, 9Dx, 9Zx, A2x, A3x, A9x, ANx, APx, AQx, ARx, AUx • 2056-CTO, 34x, 4Kx, 4Qx, 7Ax • 2081-CTO • 2082-CTO, 3Nx, 52x, 53x, 57x, 58x, 5Ax, 5Bx, 5Ex, 5Fx, 5Kx, 5Mx, 5Rx, 5Xx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Vx, 6Wx, 6Yx, 73x, 85x • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Kx, 2Lx, 2Qx, 2Rx, 2Sx, 2Vx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Nx, 3Px, 3Rx, 3Sx, 3Tx, 4Dx, 4Xx, 4Yx, 4Zx, 52x, 53x, 58x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Kx, 6Lx, 6Nx, 6Px, 6Qx, 79x, 7Gx, 7Hx, 7Qx, 82x, 84x, 87x, 88x, 8Nx, E4x, E5x • 2241-CTO, 3Xx, 3Yx, 3Zx, 43x, 4Xx, 58x, 5Tx, 5Ux, 5Zx, E1x, E5x • 2242-CTO, 22x, 26x, 28x, 33x, 36x, 37x, 38x, 4Ex, 4Fx, 4Hx, 4Kx, 5Fx, 5Gx, 6Bx, 6Rx, 6Sx, 6Yx • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Qx, 4Ux, 56x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 67x, 68x, 6Xx, 76x, 77x, 93x, 94x, 95x, 96x, 9Fx, 9Gx • 2246-CTO • 2247-CTO • 2261-CTO, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T1501	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 160 GB, 9.5 mm, 5,400 rpm • 2055-CTO, 2Cx, 2Ex, 2Lx, 2Mx, 47x, 49x, 4Ax, 4Bx, 5Rx, 5Vx, 5Wx, 65x, 75x, 76x, 7Ex, 7Fx, 7Kx, 89x, 8Ux, 9Cx, 9Dx, 9Zx, A2x, A3x, A9x, ANx, APx, AQx, ARx, AUx • 2056-CTO, 34x, 4Kx, 4Qx, 7Ax • 2081-CTO • 2082-CTO, 3Nx, 52x, 53x, 57x, 58x, 5Ax, 5Bx, 5Ex, 5Fx, 5Kx, 5Mx, 5Rx, 5Xx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Vx, 6Wx, 6Yx, 73x, 85x • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Kx, 2Lx, 2Qx, 2Rx, 2Sx, 2Vx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Nx, 3Px, 3Rx, 3Sx, 3Tx, 4Dx, 4Xx, 4Yx, 4Zx, 52x, 53x, 58x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Kx, 6Lx, 6Nx, 6Px, 6Qx, 79x, 7Gx, 7Hx, 7Qx, 82x, 84x, 87x, 88x, 8Nx, E4x, E5x • 2241-CTO, 3Xx, 3Yx, 3Zx, 43x, 4Xx, 58x, 5Tx, 5Ux, 5Zx, E1x, E5x • 2242-CTO, 22x, 26x, 28x, 33x, 36x, 37x, 38x, 4Ex, 4Fx, 4Hx, 4Kx, 5Fx, 5Gx, 6Bx, 6Rx, 6Sx, 6Yx • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Qx, 4Ux, 56x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 67x, 68x, 6Xx, 76x, 77x, 93x, 94x, 95x, 96x, 9Fx, 9Gx • 2246-CTO • 2247-CTO • 2261-CTO, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T1309	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 160 GB, 9.5 mm, 5,400 rpm • 2055-CTO, 2Cx, 2Ex, 2Lx, 2Mx, 47x, 49x, 4Ax, 4Bx, 5Rx, 5Vx, 5Wx, 65x, 75x, 76x, 7Ex, 7Fx, 7Kx, 89x, 8Ux, 9Cx, 9Dx, 9Zx, A2x, A3x, A9x, ANx, APx, AQx, ARx, AUx • 2056-CTO, 34x, 4Kx, 4Qx, 7Ax • 2081-CTO • 2082-CTO, 3Nx, 52x, 53x, 57x, 58x, 5Ax, 5Bx, 5Ex, 5Fx, 5Kx, 5Mx, 5Rx, 5Xx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Vx, 6Wx, 6Yx, 73x, 85x • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Kx, 2Lx, 2Qx, 2Rx, 2Sx, 2Vx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Nx, 3Px, 3Rx, 3Sx, 3Tx, 4Dx, 4Xx, 4Yx, 4Zx, 52x, 53x, 58x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Kx, 6Lx, 6Nx, 6Px, 6Qx, 79x, 7Gx, 7Hx, 7Qx, 82x, 84x, 87x, 88x, 8Nx, E4x, E5x • 2241-CTO, 3Xx, 3Yx, 3Zx, 43x, 4Xx, 58x, 5Tx, 5Ux, 5Zx, E1x, E5x • 2242-CTO, 22x, 26x, 28x, 33x, 36x, 37x, 38x, 4Ex, 4Fx, 4Hx, 4Kx, 5Fx, 5Gx, 6Bx, 6Rx, 6Sx, 6Yx • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Qx, 4Ux, 56x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 67x, 68x, 6Xx, 76x, 77x, 93x, 94x, 95x, 96x, 9Fx, 9Gx • 2246-CTO • 2247-CTO • 2261-CTO, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T1579	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 250 GB, 9.5 mm, 5,400 rpm **OP** • 2055-CTO, 46x, 48x, 49x, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Sx, 8Bx, 8Ex, 8Rx, 9Ux, 9Xx, A4x, E2x • 2056-CTO, 4Tx, E2x • 2081-CTO, 52x, 9Mx • 2082-CTO, 3Kx, 3Lx, 3Mx, 54x, 55x, 56x, 59x, 5Cx, 5Dx, 5Gx, 5Jx, 5Nx, 5Qx, 5Zx, 6Mx, 6Nx, 6Px, 6Qx, 6Sx, 6Tx, 6Ux, 6Xx, 72x, 7Vx, 86x, 87x, 96x, 9Nx, AAx, B7x, B8x, BBx • 2083-CTO • 2087-CTO • 2088-CTO, 3Yx, 3Zx, 42x, 43x • 2089-CTO, 2Wx, 3Mx, 3Qx, 3Vx, 4Wx, 6Mx, 7Jx, 7Kx, 83x, 89x, 8Ax, 8Bx, 8Cx, E1x • 2241-CTO, 42x, E2x • 2242-CTO, 24x, 25x, 27x, 39x, 3Ax, 4Gx, 4Jx, 5Ex, 5Vx, 66x, 7Ux, 8Sx • 2243-CTO, 2Bx, 4Rx, 4Sx, 57x, 62x, 63x, 64x, 65x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 7Ax, 7Bx, 7Cx, 7Dx, 7Rx, 7Sx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 99x, 9Dx, 9Ex, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 3Gx, 7Zx • 4058-CTO, 22x • 4061-CTO, 39x, 3Dx • 4062-CTO, 29x, 2Ax, 2Bx, 3Gx, 3Mx • 4063-CTO • 4064-CTO • 4065-CTO	42T1471	**
11	SATA hard disk drive, 250 GB, 9.5 mm, 5,400 rpm **OP** • 2055-CTO, 46x, 48x, 49x, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Sx, 8Bx, 8Ex, 8Rx, 9Ux, 9Xx, A4x, E2x • 2056-CTO, 4Tx, E2x • 2081-CTO, 52x, 9Mx • 2082-CTO, 3Kx, 3Lx, 3Mx, 54x, 55x, 56x, 59x, 5Cx, 5Dx, 5Gx, 5Jx, 5Nx, 5Qx, 5Zx, 6Mx, 6Nx, 6Px, 6Qx, 6Sx, 6Tx, 6Ux, 6Xx, 72x, 7Vx, 86x, 87x, 96x, 9Nx, AAx, B7x, B8x, BBx • 2083-CTO • 2087-CTO • 2088-CTO, 3Yx, 3Zx, 42x, 43x • 2089-CTO, 2Wx, 3Mx, 3Qx, 3Vx, 4Wx, 6Mx, 7Jx, 7Kx, 83x, 89x, 8Ax, 8Bx, 8Cx, E1x • 2241-CTO, 42x, E2x • 2242-CTO, 24x, 25x, 27x, 39x, 3Ax, 4Gx, 4Jx, 5Ex, 5Vx, 66x, 7Ux, 8Sx • 2243-CTO, 2Bx, 4Rx, 4Sx, 57x, 62x, 63x, 64x, 65x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 7Ax, 7Bx, 7Cx, 7Dx, 7Rx, 7Sx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 99x, 9Dx, 9Ex, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 3Gx, 7Zx • 4058-CTO, 22x • 4061-CTO, 39x, 3Dx • 4062-CTO, 29x, 2Ax, 2Bx, 3Gx, 3Mx • 4063-CTO • 4064-CTO • 4065-CTO	42T1481	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 250 GB, 9.5 mm, 5,400 rpm • 2055-CTO, 46x, 48x, 49x, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Sx, 8Bx, 8Ex, 8Rx, 9Ux, 9Xx, A4x, E2x • 2056-CTO, 4Tx, E2x • 2081-CTO, 52x, 9Mx • 2082-CTO, 3Kx, 3Lx, 3Mx, 54x, 55x, 56x, 59x, 5Cx, 5Dx, 5Gx, 5Jx, 5Nx, 5Qx, 5Zx, 6Mx, 6Nx, 6Px, 6Qx, 6Sx, 6Tx, 6Ux, 6Xx, 72x, 7Vx, 86x, 87x, 96x, 9Nx, AAx, B7x, B8x, BBx • 2083-CTO • 2087-CTO • 2088-CTO, 3Yx, 3Zx, 42x, 43x • 2089-CTO, 2Wx, 3Mx, 3Qx, 3Vx, 4Wx, 6Mx, 7Jx, 7Kx, 83x, 89x, 8Ax, 8Bx, 8Cx, E1x • 2241-CTO, 42x, E2x • 2242-CTO, 24x, 25x, 27x, 39x, 3Ax, 4Gx, 4Jx, 5Ex, 5Vx, 66x, 7Ux, 8Sx • 2243-CTO, 2Bx, 4Rx, 4Sx, 57x, 62x, 63x, 64x, 65x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 7Ax, 7Bx, 7Cx, 7Dx, 7Rx, 7Sx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 99x, 9Dx, 9Ex, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 3Gx, 7Zx • 4058-CTO, 22x • 4061-CTO, 39x, 3Dx • 4062-CTO, 29x, 2Ax, 2Bx, 3Gx, 3Mx • 4063-CTO • 4064-CTO • 4065-CTO	42T1517	**
11	SATA hard disk drive, 250 GB, 9.5 mm, 5,400 rpm • 2055-CTO, 46x, 48x, 49x, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Sx, 8Bx, 8Ex, 8Rx, 9Ux, 9Xx, A4x, E2x • 2056-CTO, 4Tx, E2x • 2081-CTO, 52x, 9Mx • 2082-CTO, 3Kx, 3Lx, 3Mx, 54x, 55x, 56x, 59x, 5Cx, 5Dx, 5Gx, 5Jx, 5Nx, 5Qx, 5Zx, 6Mx, 6Nx, 6Px, 6Qx, 6Sx, 6Tx, 6Ux, 6Xx, 72x, 7Vx, 86x, 87x, 96x, 9Nx, AAx, B7x, B8x, BBx • 2083-CTO • 2087-CTO • 2088-CTO, 3Yx, 3Zx, 42x, 43x • 2089-CTO, 2Wx, 3Mx, 3Qx, 3Vx, 4Wx, 6Mx, 7Jx, 7Kx, 83x, 89x, 8Ax, 8Bx, 8Cx, E1x • 2241-CTO, 42x, E2x • 2242-CTO, 24x, 25x, 27x, 39x, 3Ax, 4Gx, 4Jx, 5Ex, 5Vx, 66x, 7Ux, 8Sx • 2243-CTO, 2Bx, 4Rx, 4Sx, 57x, 62x, 63x, 64x, 65x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 7Ax, 7Bx, 7Cx, 7Dx, 7Rx, 7Sx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 99x, 9Dx, 9Ex, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 3Gx, 7Zx • 4058-CTO, 22x • 4061-CTO, 39x, 3Dx • 4062-CTO, 29x, 2Ax, 2Bx, 3Gx, 3Mx • 4063-CTO • 4064-CTO • 4065-CTO	42T1581	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 320 GB, 9.5 mm, 5,400 rpm • 2055-CTO, 4Ax, 4Cx, 5Rx, 62x, 64x, 8Nx, 8Qx, 8Sx, 8Tx, A5x, AHx, AJx, AKx, AVx, B2x, B3x • 2056-CTO • 2081-CTO, 7Wx • 2082-CTO, 3Jx, 5Px, 6Rx, 6Zx, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Xx, 7Zx, 82x, 83x, 84x, 8Vx, 8Wx, 8Xx, 8Yx, 97x, 98x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, 9Px, 9Qx, ABx, AEx, B5x, B6x, B9x, BAx, BJx, BPx, BQx, BRx, BSx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 3Ux • 2241-CTO • 2242-CTO, 7Vx, 8Qx, 8Rx, BVx, BWx • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 3Lx • 4061-CTO, 2Lx, 2Mx, 2Nx, 2Px, 2Qx • 4062-CTO, 3Px, 3Qx, 3Rx, 3Sx, 58x • 4063-CTO, 2Ux • 4064-CTO • 4065-CTO	42T1535	**
11	SATA hard disk drive, 320 GB, 9.5 mm, 5,400 rpm • 2055-CTO, 4Ax, 4Cx, 5Rx, 62x, 64x, 8Nx, 8Qx, 8Sx, 8Tx, A5x, AHx, AJx, AKx, AVx, B2x, B3x • 2056-CTO • 2081-CTO, 7Wx • 2082-CTO, 3Jx, 5Px, 6Rx, 6Zx, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Xx, 7Zx, 82x, 83x, 84x, 8Vx, 8Wx, 8Xx, 8Yx, 97x, 98x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, 9Px, 9Qx, ABx, AEx, B5x, B6x, B9x, BAx, BJx, BPx, BQx, BRx, BSx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 3Ux • 2241-CTO • 2242-CTO, 7Vx, 8Qx, 8Rx, BVx, BWx • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 3Lx • 4061-CTO, 2Lx, 2Mx, 2Nx, 2Px, 2Qx • 4062-CTO, 3Px, 3Qx, 3Rx, 3Sx, 58x • 4063-CTO, 2Ux • 4064-CTO • 4065-CTO	42T1583	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 320 GB, 9.5 mm, 5,400 rpm **OP** • 2055-CTO, 4Ax, 4Cx, 5Rx, 62x, 64x, 8Nx, 8Qx, 8Sx, 8Tx, A5x, AHx, AJx, AKx, AVx, B2x, B3x • 2056-CTO • 2081-CTO, 7Wx • 2082-CTO, 3Jx, 5Px, 6Rx, 6Zx, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Xx, 7Zx, 82x, 83x, 84x, 8Vx, 8Wx, 8Xx, 8Yx, 97x, 98x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, 9Px, 9Qx, ABx, AEx, B5x, B6x, B9x, BAx, BJx, BPx, BQx, BRx, BSx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 3Ux • 2241-CTO • 2242-CTO, 7Vx, 8Qx, 8Rx, BVx, BWx • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 3Lx • 4061-CTO, 2Lx, 2Mx, 2Nx, 2Px, 2Qx • 4062-CTO, 3Px, 3Qx, 3Rx, 3Sx, 58x • 4063-CTO, 2Ux • 4064-CTO • 4065-CTO	42T1507	**
11	SATA hard disk drive, 500 GB, 9.5 mm, 5,400 rpm • 2055-CTO, A7x, A8x, A9x, APx, AUx • 2056-CTO • 2081-CTO • 2082-CTO, ADx, AGx, BDx, BGx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 4Vx, 64x • 4062-CTO, 4Tx • 4063-CTO • 4064-CTO • 4065-CTO	45N7221	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 500 GB, 9.5 mm, 5,400 rpm • 2055-CTO, A7x, A8x, A9x, APx, AUx • 2056-CTO • 2081-CTO • 2082-CTO, ADx, AGx, BDx, BGx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 4Vx, 64x • 4062-CTO, 4Tx • 4063-CTO • 4064-CTO • 4065-CTO	45N7211	**
11	SATA hard disk drive, 500 GB, 9.5 mm, 5,400 rpm • 2055-CTO, A7x, A8x, A9x, APx, AUx • 2056-CTO • 2081-CTO • 2082-CTO, ADx, AGx, BDx, BGx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 4Vx, 64x • 4062-CTO, 4Tx • 4063-CTO • 4064-CTO • 4065-CTO	45N7233	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 100 GB, 9.5 mm, 7,200 rpm **OP** • 2055-CTO, 2Nx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Ux • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T1485	**
11	SATA hard disk drive, 100 GB, 9.5 mm, 7,200 rpm • 2055-CTO, 2Nx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Ux • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	39T2799	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 160 GB, 9.5 mm, 7,200 rpm • 2055-CTO, 2Dx, 2Ex, 2Px, 2Vx, 3Ax, 45x, 5Tx, 5Vx, 5Wx, 63x, 77x, 78x, 7Gx, 7Hx, 7Jx, 7Lx, 8Ax, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Kx, 9Ax, 9Bx, 9Lx, 9Rx, 9Vx, 9Wx, 9Yx, 9Zx, AWx, AXx, AYx, AZx, B4x, E1x, E3x • 2056-CTO, 4Rx, 4Sx, 5Tx, 63x, 7Bx, 7Cx, 7Lx, E1x, E3x • 2081-CTO, 7Wx • 2082-CTO, 26x, 27x, 3Fx, 3Gx, 3Hx, 6Lx, 7Yx, 8Zx, 92x, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 44x • 2089-CTO, 2Mx, 54x, 6Jx, 7Ex, 7Fx, 85x, 86x, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, E2x, E3x • 2241-CTO, 44x, E3x, E4x • 2242-CTO, 23x, 32x, 34x, 35x, 55x, 5Hx, 6Zx, 72x, 73x, 74x, 8Px • 2243-CTO, 4Px, 4Tx, 78x • 2246-CTO • 2247-CTO • 2261-CTO, 3Fx • 4058-CTO • 4061-CTO, 2Hx, 2Jx, 2Sx, 2Zx, 32x, 38x, 3Ex, 3Fx, 3Tx, 3Ux, 49x, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx • 4062-CTO, 24x, 27x, 2Xx, 2Yx, 35x, 36x, 3Ax, 3Hx, 4Kx, 54x, 5Rx • 4063-CTO, 2Tx, 33x, 34x, 3Fx • 4064-CTO • 4065-CTO	42T1465	**
11	SATA hard disk drive, 160 GB, 9.5 mm, 7,200 rpm **OP** • 2055-CTO, 2Dx, 2Ex, 2Px, 2Vx, 3Ax, 45x, 5Tx, 5Vx, 5Wx, 63x, 77x, 78x, 7Gx, 7Hx, 7Jx, 7Lx, 8Ax, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Kx, 9Ax, 9Bx, 9Lx, 9Rx, 9Vx, 9Wx, 9Yx, 9Zx, AWx, AXx, AYx, AZx, B4x, E1x, E3x • 2056-CTO, 4Rx, 4Sx, 5Tx, 63x, 7Bx, 7Cx, 7Lx, E1x, E3x • 2081-CTO, 7Wx • 2082-CTO, 26x, 27x, 3Fx, 3Gx, 3Hx, 6Lx, 7Yx, 8Zx, 92x, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 44x • 2089-CTO, 2Mx, 54x, 6Jx, 7Ex, 7Fx, 85x, 86x, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, E2x, E3x • 2241-CTO, 44x, E3x, E4x • 2242-CTO, 23x, 32x, 34x, 35x, 55x, 5Hx, 6Zx, 72x, 73x, 74x, 8Px • 2243-CTO, 4Px, 4Tx, 78x • 2246-CTO • 2247-CTO • 2261-CTO, 3Fx • 4058-CTO • 4061-CTO, 2Hx, 2Jx, 2Sx, 2Zx, 32x, 38x, 3Ex, 3Fx, 3Tx, 3Ux, 49x, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx • 4062-CTO, 24x, 27x, 2Xx, 2Yx, 35x, 36x, 3Ax, 3Hx, 4Kx, 54x, 5Rx • 4063-CTO, 2Tx, 33x, 34x, 3Fx • 4064-CTO • 4065-CTO	42T1461	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 160 GB, 9.5 mm, 7,200 rpm • 2055-CTO, 2Dx, 2Ex, 2Px, 2Vx, 3Ax, 45x, 5Tx, 5Vx, 5Wx, 63x, 77x, 78x, 7Gx, 7Hx, 7Jx, 7Lx, 8Ax, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Kx, 9Ax, 9Bx, 9Lx, 9Rx, 9Vx, 9Wx, 9Yx, 9Zx, AWx, AXx, AYx, AZx, B4x, E1x, E3x • 2056-CTO, 4Rx, 4Sx, 5Tx, 63x, 7Bx, 7Cx, 7Lx, E1x, E3x • 2081-CTO, 7Wx • 2082-CTO, 26x, 27x, 3Fx, 3Gx, 3Hx, 6Lx, 7Yx, 8Zx, 92x, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 44x • 2089-CTO, 2Mx, 54x, 6Jx, 7Ex, 7Fx, 85x, 86x, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, E2x, E3x • 2241-CTO, 44x, E3x, E4x • 2242-CTO, 23x, 32x, 34x, 35x, 55x, 5Hx, 6Zx, 72x, 73x, 74x, 8Px • 2243-CTO, 4Px, 4Tx, 78x • 2246-CTO • 2247-CTO • 2261-CTO, 3Fx • 4058-CTO • 4061-CTO, 2Hx, 2Jx, 2Sx, 2Zx, 32x, 38x, 3Ex, 3Fx, 3Tx, 3Ux, 49x, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx • 4062-CTO, 24x, 27x, 2Xx, 2Yx, 35x, 36x, 3Ax, 3Hx, 4Kx, 54x, 5Rx • 4063-CTO, 2Tx, 33x, 34x, 3Fx • 4064-CTO • 4065-CTO	42T1439	**
11	SATA hard disk drive, 200 GB, 9.5 mm, 7,200 rpm, Full Disk Encryption (FDE) OP • 2055-CTO, 2Xx • 2056-CTO • 2081-CTO, 22x, 24x, 3Ex, 53x • 2082-CTO, 28x, 3Rx, 5Yx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 23x • 4061-CTO, 2Kx • 4062-CTO, 25x, 26x, 28x, 2Gx, 37x, 3Bx, 3Cx, 3Jx, 3Kx, 4Dx, 4Ex • 4063-CTO • 4064-CTO • 4065-CTO	42T1463	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 200 GB, 9.5 mm, 7,200 rpm, FDE • 2055-CTO, 2Xx • 2056-CTO • 2081-CTO, 22x, 24x, 3Ex, 53x • 2082-CTO, 28x, 3Rx, 5Yx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 23x • 4061-CTO, 2Kx • 4062-CTO, 25x, 26x, 28x, 2Gx, 37x, 3Bx, 3Cx, 3Jx, 3Kx, 4Dx, 4Ex • 4063-CTO • 4064-CTO • 4065-CTO	42T1561	**
11	SATA hard disk drive, 250 GB, 9.5 mm, 7,200 rpm, FDE • 2055-CTO, 8Jx, 9Sx, 9Tx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 3Xx, 44x, 4Rx, 53x • 4062-CTO, 4Jx, 5Cx, 5Gx • 4063-CTO • 4064-CTO • 4065-CTO	42T1563	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 250 GB, 9.5 mm, 7,200 rpm, FDE • 2055-CTO, 8Jx, 9Sx, 9Tx • 2056-CTO • 2081-CTO, 7Tx • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 3Xx, 44x, 4Rx, 53x • 4062-CTO, 4Jx, 5Cx, 5Gx • 4063-CTO • 4064-CTO • 4065-CTO	42T1573	**
11	SATA hard disk drive, 250 GB, 9.5 mm, 7,200 rpm, FDE • 2055-CTO, 8Jx, 9Sx, 9Tx • 2056-CTO • 2081-CTO, 7Tx • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 3Xx, 44x, 4Rx, 53x • 4062-CTO, 4Jx, 5Cx, 5Gx • 4063-CTO • 4064-CTO • 4065-CTO	42T1527	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 320 GB, 9.5 mm, 7,200 rpm • 2055-CTO, 8Lx, 8Mx, 8Px, A6x, ALx, AMx • 2056-CTO • 2081-CTO • 2082-CTO, 93x, 94x, 95x, ACx, AFx, BCx, BFx, BKx, BMx, BNx • 2083-CTO • 2087-CTO • 2088-CTO, 88x • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO, 7Mx, 7Nx, 7Px, 7Wx, 97x, 98x, 9Ax, 9Bx • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 4Sx • 4061-CTO, 3Vx, 3Wx, 3Yx, 3Zx, 42x, 43x, 45x, 46x, 47x, 48x, 4Ax, 4Bx, 4Qx, 4Ux, 4Wx, 4Zx, 52x, 6Ax, 6Bx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 3Nx, 4Fx, 4Gx, 4Hx, 4Mx, 4Nx, 4Xx, 4Yx, 55x, 56x, 59x, 5Dx, 5Ex, 5Fx, 5Hx, 5Jx, 5Kx, 5Lx, 5Nx, 5Qx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 4Cx • 4064-CTO • 4065-CTO	42T1559	**
11	SATA hard disk drive, 320 GB, 9.5 mm, 7,200 rpm • 2055-CTO, 8Lx, 8Mx, 8Px, A6x, ALx, AMx • 2056-CTO • 2081-CTO • 2082-CTO, 93x, 94x, 95x, ACx, AFx, BCx, BFx, BKx, BMx, BNx • 2083-CTO • 2087-CTO • 2088-CTO, 88x • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO, 7Mx, 7Nx, 7Px, 7Wx, 97x, 98x, 9Ax, 9Bx • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 4Sx • 4061-CTO, 3Vx, 3Wx, 3Yx, 3Zx, 42x, 43x, 45x, 46x, 47x, 48x, 4Ax, 4Bx, 4Qx, 4Ux, 4Wx, 4Zx, 52x, 6Ax, 6Bx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 3Nx, 4Fx, 4Gx, 4Hx, 4Mx, 4Nx, 4Xx, 4Yx, 55x, 56x, 59x, 5Dx, 5Ex, 5Fx, 5Hx, 5Jx, 5Kx, 5Lx, 5Nx, 5Qx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 4Cx • 4064-CTO • 4065-CTO	42T1571	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
11	SATA hard disk drive, 320 GB, 9.5 mm, 7,200 rpm • 2055-CTO, 8Lx, 8Mx, 8Px, A6x, ALx, AMx • 2056-CTO • 2081-CTO • 2082-CTO, 93x, 94x, 95x, ACx, AFx, BCx, BFx, BKx, BMx, BNx • 2083-CTO • 2087-CTO • 2088-CTO, 88x • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO, 7Mx, 7Nx, 7Px, 7Wx, 97x, 98x, 9Ax, 9Bx • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 4Sx • 4061-CTO, 3Vx, 3Wx, 3Yx, 3Zx, 42x, 43x, 45x, 46x, 47x, 48x, 4Ax, 4Bx, 4Qx, 4Ux, 4Wx, 4Zx, 52x, 6Ax, 6Bx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 3Nx, 4Fx, 4Gx, 4Hx, 4Mx, 4Nx, 4Xx, 4Yx, 55x, 56x, 59x, 5Dx, 5Ex, 5Fx, 5Hx, 5Jx, 5Kx, 5Lx, 5Nx, 5Qx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 4Cx • 4064-CTO • 4065-CTO	42T1525	**
12	SATA hard disk drive, 500 GB, 9.5 mm, 7,200 rpm • 2055-CTO, ANx, AQx, ARx, ASx, ATx • 2056-CTO • 2081-CTO • 2082-CTO, BEx, BHx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 65x, 66x, 67x, 68x, 69x • 4062-CTO, 57x, 5Mx, 5Px • 4063-CTO • 4064-CTO • 4065-CTO	45N7267	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
12	SATA hard disk drive, 500 GB, 9.5 mm, 7,200 rpm • 2055-CTO, ANx, AQx, ARx, ASx, ATx • 2056-CTO • 2081-CTO • 2082-CTO, BEx, BHx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 65x, 66x, 67x, 68x, 69x • 4062-CTO, 57x, 5Mx, 5Px • 4063-CTO • 4064-CTO • 4065-CTO	45N7257	**
12	1.8-inch - 2.5-inch storage converter • 2055-CTO, 5Ux, 9Kx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 6Cx, 75x, 7Lx • 2243-CTO, 9Cx • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Rx, 4Px • 4062-CTO, 2Cx, 2Dx, 2Ex, 2Fx, 4Lx • 4063-CTO • 4064-CTO • 4065-CTO	42W7888	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
13	SATA solid state drive, 64 GB, 8 mm • 2055-CTO, 5Ux • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Rx • 4062-CTO, 2Cx, 2Dx, 2Ex, 2Fx • 4063-CTO • 4064-CTO • 4065-CTO	42T1898	**
13	SATA solid state drive, 64 GB, 8 mm • 2055-CTO, 5Ux • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Rx • 4062-CTO, 2Cx, 2Dx, 2Ex, 2Fx • 4063-CTO • 4064-CTO • 4065-CTO	41W0520	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
13	SATA solid state drive, 64 GB, 8 mm • 2055-CTO, 5Ux • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Rx • 4062-CTO, 2Cx, 2Dx, 2Ex, 2Fx • 4063-CTO • 4064-CTO • 4065-CTO	45N7951	**
13	SATA solid state drive, 64 GB, 8 mm • 2055-CTO, 5Ux • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Rx • 4062-CTO, 2Cx, 2Dx, 2Ex, 2Fx • 4063-CTO • 4064-CTO • 4065-CTO	45N8201	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
13	SATA solid state drive, 80 GB, 8 mm • 2055-CTO, 9Kx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 7Lx • 2243-CTO, 9Cx • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 4Px • 4062-CTO, 4Lx • 4063-CTO • 4064-CTO • 4065-CTO	41W0516	**
13	SATA solid state drive, 128 GB, 8 mm • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 6Cx, 75x • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	41W0519	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
13	SATA solid state drive, 128 GB, 8 mm • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 6Cx, 75x • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	45N7953	**
13	SATA solid state drive, 128 GB, 8 mm • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 6Cx, 75x • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	45N8203	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
13	SATA solid state drive, 128 GB, 8 mm, FDE • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	45N7955	**
13	SATA solid state drive, 128 GB, 8 mm, FDE • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	45N8205	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
13	SATA solid state drive, 160 GB, 8 mm • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	41W0522	**
13	SATA solid state drive, 256 GB, 8 mm • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	45N8207	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
14	Battery pack, Li-ion (6 cell, 2.4 Ah) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T4670	*
14	Battery pack, Li-ion (6 cell, 2.4 Ah) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T4671	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
14	Battery pack, Li-ion (6 cell, 2.4 Ah) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T4778	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
14	Battery pack, Li-ion (6 cell, 2.6 Ah) • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Lx, 2Mx, 2Nx, 2Px, 47x, 48x, 49x, 4Ax, 5Rx, 5Sx, 62x, 64x, 65x, 74x, 75x, 76x, 77x, 7Ex, 7Fx, 7Gx, 7Hx, 7Kx, 89x, 8Ax, 8Bx, 8Ex, 8Fx, 8Gx, 8Jx, 8Kx, 8Lx, 8Nx, 8Px, 8Qx, 8Rx, 8Ux, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, AZx • 2056-CTO, 34x, 4Kx, 4Px, 4Qx, 79x, 7Ax • 2081-CTO, 52x, 53x, 7Wx, 9Mx • 2082-CTO, 3Lx, 3Mx, 3Nx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Qx, 5Rx, 5Xx, 5Zx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Mx, 6Nx, 6Px, 6Qx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 72x, 73x, 7Dx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 97x, 98x, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Mx, 2Qx, 2Rx, 2Sx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 3Hx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 4Dx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 59x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 79x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, E1x, E3x, E4x, E5x • 2241-CTO, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Sx, 5Tx, 5Ux, 5Zx, E1x, E2x, E4x, E5x • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Fx, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Px, 8Qx, 8Rx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx, 7Zx • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Jx, 2Rx, 2Sx, 3Fx, 3Tx, 3Xx, 44x, 49x, 4Qx, 4Rx, 52x, 53x, 64x, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Kx • 4062-CTO, 29x, 2Bx, 2Dx, 2Ex, 2Fx, 37x, 3Cx, 3Gx, 3Jx, 3Kx, 3Mx, 4Dx, 4Ex, 4Mx, 4Nx, 4Xx, 4Yx, 54x, 55x, 56x, 59x, 5Cx, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 3Fx • 4064-CTO • 4065-CTO	42T4621	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
14	Battery pack, Li-ion (6 cell, 2.6 Ah) • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Lx, 2Mx, 2Nx, 2Px, 47x, 48x, 49x, 4Ax, 5Rx, 5Sx, 62x, 64x, 65x, 74x, 75x, 76x, 77x, 7Ex, 7Fx, 7Gx, 7Hx, 7Kx, 89x, 8Ax, 8Bx, 8Ex, 8Fx, 8Gx, 8Jx, 8Kx, 8Lx, 8Nx, 8Px, 8Qx, 8Rx, 8Ux, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, AZx • 2056-CTO, 34x, 4Kx, 4Px, 4Qx, 79x, 7Ax • 2081-CTO, 52x, 53x, 7Wx, 9Mx • 2082-CTO, 3Lx, 3Mx, 3Nx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Qx, 5Rx, 5Xx, 5Zx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Mx, 6Nx, 6Px, 6Qx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 72x, 73x, 7Dx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 97x, 98x, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Mx, 2Qx, 2Rx, 2Sx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 3Hx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 4Dx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 59x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 79x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, E1x, E3x, E4x, E5x • 2241-CTO, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Sx, 5Tx, 5Ux, 5Zx, E1x, E2x, E4x, E5x • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Fx, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Px, 8Qx, 8Rx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx, 7Zx • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Jx, 2Rx, 2Sx, 3Fx, 3Tx, 3Xx, 44x, 49x, 4Qx, 4Rx, 52x, 53x, 64x, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Kx • 4062-CTO, 29x, 2Bx, 2Dx, 2Ex, 2Fx, 37x, 3Cx, 3Gx, 3Jx, 3Kx, 3Mx, 4Dx, 4Ex, 4Mx, 4Nx, 4Xx, 4Yx, 54x, 55x, 56x, 59x, 5Cx, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 3Fx • 4064-CTO • 4065-CTO	42T4622	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
14	Battery pack, Li-ion (6 cell, 2.6 Ah) • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Lx, 2Mx, 2Nx, 2Px, 47x, 48x, 49x, 4Ax, 5Rx, 5Sx, 62x, 64x, 65x, 74x, 75x, 76x, 77x, 7Ex, 7Fx, 7Gx, 7Hx, 7Kx, 89x, 8Ax, 8Bx, 8Ex, 8Fx, 8Gx, 8Jx, 8Kx, 8Lx, 8Nx, 8Px, 8Qx, 8Rx, 8Ux, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, AZx • 2056-CTO, 34x, 4Kx, 4Px, 4Qx, 79x, 7Ax • 2081-CTO, 52x, 53x, 7Wx, 9Mx • 2082-CTO, 3Lx, 3Mx, 3Nx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Qx, 5Rx, 5Xx, 5Zx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Mx, 6Nx, 6Px, 6Qx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 72x, 73x, 7Dx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 97x, 98x, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Mx, 2Qx, 2Rx, 2Sx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 3Hx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 4Dx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 59x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 79x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, E1x, E3x, E4x, E5x • 2241-CTO, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Sx, 5Tx, 5Ux, 5Zx, E1x, E2x, E4x, E5x • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Fx, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Px, 8Qx, 8Rx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx, 7Zx • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Jx, 2Rx, 2Sx, 3Fx, 3Tx, 3Xx, 44x, 49x, 4Qx, 4Rx, 52x, 53x, 64x, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Kx • 4062-CTO, 29x, 2Bx, 2Dx, 2Ex, 2Fx, 37x, 3Cx, 3Gx, 3Jx, 3Kx, 3Mx, 4Dx, 4Ex, 4Mx, 4Nx, 4Xx, 4Yx, 54x, 55x, 56x, 59x, 5Cx, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 3Fx • 4064-CTO • 4065-CTO	42T4777	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
14	Battery pack, Li-ion (9 cell) • 2055-CTO, 2Ex, 2Vx, 2Xx, 3Ax, 45x, 46x, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Tx, 5Ux, 5Vx, 5Wx, 63x, 78x, 7Jx, 7Lx, 8Cx, 8Dx, 8Hx, 8Mx, 8Sx, 8Tx, 9Ax, 9Bx, 9Yx, 9Zx, B2x, B3x, B4x, E1x, E2x, E3x • 2056-CTO, 4Rx, 4Sx, 4Tx, 5Tx, 63x, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 3Ex • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Rx, 5Px, 5Yx, 6Lx, 6Rx, 6Sx, 6Zx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Lx, 3Jx, E2x • 2241-CTO, E3x • 2242-CTO • 2243-CTO, 77x, 78x, 7Ax • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Hx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Zx, 32x, 38x, 39x, 3Dx, 3Ex, 3Ux, 3Vx, 3Wx, 3Yx, 3Zx, 42x, 43x, 45x, 46x, 47x, 48x, 4Ax, 4Bx, 4Px, 4Ux, 4Vx, 4Wx, 4Zx, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Hx, 6Jx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 2Ax, 2Cx, 2Gx, 2Xx, 2Yx, 35x, 36x, 3Ax, 3Bx, 3Hx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Tx, 57x, 58x, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px • 4063-CTO, 2Tx, 2Ux, 33x, 34x, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T4619	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
14	Battery pack, Li-ion (9 cell) • 2055-CTO, 2Ex, 2Vx, 2Xx, 3Ax, 45x, 46x, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Tx, 5Ux, 5Vx, 5Wx, 63x, 78x, 7Jx, 7Lx, 8Cx, 8Dx, 8Hx, 8Mx, 8Sx, 8Tx, 9Ax, 9Bx, 9Yx, 9Zx, B2x, B3x, B4x, E1x, E2x, E3x • 2056-CTO, 4Rx, 4Sx, 4Tx, 5Tx, 63x, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 3Ex • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Rx, 5Px, 5Yx, 6Lx, 6Rx, 6Sx, 6Zx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Lx, 3Jx, E2x • 2241-CTO, E3x • 2242-CTO • 2243-CTO, 77x, 78x, 7Ax • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Hx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Zx, 32x, 38x, 39x, 3Dx, 3Ex, 3Ux, 3Vx, 3Wx, 3Yx, 3Zx, 42x, 43x, 45x, 46x, 47x, 48x, 4Ax, 4Bx, 4Px, 4Ux, 4Vx, 4Wx, 4Zx, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Hx, 6Jx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 2Ax, 2Cx, 2Gx, 2Xx, 2Yx, 35x, 36x, 3Ax, 3Bx, 3Hx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Tx, 57x, 58x, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px • 4063-CTO, 2Tx, 2Ux, 33x, 34x, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T4620	*
15	RJ-11 sub card	42W7887	N
15	RJ-11 sub card	42W7886	N
16	DVD drive, 9.5 mm • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T2553	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
16	DVD drive, 9.5 mm • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T2541	N
16	DVD/CD-RW combo drive, 9.5 mm • 2055-CTO, 2Bx, 74x, 7Ex, 7Fx • 2056-CTO, 34x, 4Px, 79x • 2081-CTO • 2082-CTO, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Jx, 2Yx, 59x • 2241-CTO, 3Wx, 5Sx • 2242-CTO, 4Ex, 4Fx • 2243-CTO, 56x • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T2543	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
16	DVD/CD-RW combo drive, 9.5 mm • 2055-CTO, 2Bx, 74x, 7Ex, 7Fx • 2056-CTO, 34x, 4Px, 79x • 2081-CTO • 2082-CTO, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO • 2089-CTO, 2Jx, 2Yx, 59x • 2241-CTO, 3Wx, 5Sx • 2242-CTO, 4Ex, 4Fx • 2243-CTO, 56x • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T2555	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
16	DVD-RAM/RW drive, 9.5 mm • 2055-CTO, 2Cx, 2Dx, 2Ex, 2Lx, 2Mx, 2Nx, 2Px, 2Vx, 2Xx, 3Ax, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 63x, 64x, 65x, 75x, 76x, 77x, 78x, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Ux, 9Ax, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, E1x, E2x, E3x • 2056-CTO, 4Kx, 4Qx, 4Rx, 4Sx, 4Tx, 5Tx, 63x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 3Ex, 52x, 53x, 7Wx, 9Mx • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Mx, 5Nx, 5Qx, 5Rx, 5Xx, 5Yx, 5Zx, 66x, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 72x, 73x, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 7Zx, 82x, 83x, 85x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Hx, 2Kx, 2Lx, 2Mx, 2Qx, 2Rx, 2Sx, 2Ux, 2Vx, 2Wx, 2Xx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 4Dx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 79x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, E1x, E2x, E3x, E4x, E5x • 2241-CTO, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Tx, 5Ux, 5Zx, E1x, E2x, E3x, E4x, E5x • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Fx, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Px, 8Qx, 8Rx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 2Ex, 2Gx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx, 7Zx • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Zx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 43x, 44x, 45x, 47x, 48x, 49x, 4Ax, 4Px, 4Qx, 4Rx, 4Ux, 4Wx, 4Zx, 52x, 53x, 64x, 65x, 66x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Xx, 2Yx, 35x, 36x, 37x, 3Ax, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 54x, 55x, 56x, 57x, 58x, 59x, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Tx, 33x, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T2545	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
16	DVD-RAM/RW drive, 9.5 mm • 2055-CTO, 2Cx, 2Dx, 2Ex, 2Lx, 2Mx, 2Nx, 2Px, 2Vx, 2Xx, 3Ax, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 63x, 64x, 65x, 75x, 76x, 77x, 78x, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Ux, 9Ax, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, E1x, E2x, E3x • 2056-CTO, 4Kx, 4Qx, 4Rx, 4Sx, 4Tx, 5Tx, 63x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 3Ex, 52x, 53x, 7Wx, 9Mx • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Mx, 5Nx, 5Qx, 5Rx, 5Xx, 5Yx, 5Zx, 66x, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 72x, 73x, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 7Zx, 82x, 83x, 85x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Hx, 2Kx, 2Lx, 2Mx, 2Qx, 2Rx, 2Sx, 2Ux, 2Vx, 2Wx, 2Xx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 4Dx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 79x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, E1x, E2x, E3x, E4x, E5x • 2241-CTO, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Tx, 5Ux, 5Zx, E1x, E2x, E3x, E4x, E5x • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Fx, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Px, 8Qx, 8Rx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 2Ex, 2Gx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx, 7Zx • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Zx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 43x, 44x, 45x, 47x, 48x, 49x, 4Ax, 4Px, 4Qx, 4Rx, 4Ux, 4Wx, 4Zx, 52x, 53x, 64x, 65x, 66x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Xx, 2Yx, 35x, 36x, 37x, 3Ax, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 54x, 55x, 56x, 57x, 58x, 59x, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Tx, 33x, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T2557	*

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
16	DVD-RAM/RW drive, 9.5 mm • 2055-CTO, 2Cx, 2Dx, 2Ex, 2Lx, 2Mx, 2Nx, 2Px, 2Vx, 2Xx, 3Ax, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 63x, 64x, 65x, 75x, 76x, 77x, 78x, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Ux, 9Ax, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, E1x, E2x, E3x • 2056-CTO, 4Kx, 4Qx, 4Rx, 4Sx, 4Tx, 5Tx, 63x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 3Ex, 52x, 53x, 7Wx, 9Mx • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Mx, 5Nx, 5Qx, 5Rx, 5Xx, 5Yx, 5Zx, 66x, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 72x, 73x, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 7Zx, 82x, 83x, 85x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Hx, 2Kx, 2Lx, 2Mx, 2Qx, 2Rx, 2Sx, 2Ux, 2Vx, 2Wx, 2Xx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 4Dx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 79x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, E1x, E2x, E3x, E4x, E5x • 2241-CTO, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Tx, 5Ux, 5Zx, E1x, E2x, E3x, E4x, E5x • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Fx, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Px, 8Qx, 8Rx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 2Ex, 2Gx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx, 7Zx • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Zx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 43x, 44x, 45x, 47x, 48x, 49x, 4Ax, 4Px, 4Qx, 4Rx, 4Ux, 4Wx, 4Zx, 52x, 53x, 64x, 65x, 66x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Xx, 2Yx, 35x, 36x, 37x, 3Ax, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 54x, 55x, 56x, 57x, 58x, 59x, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Tx, 33x, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T2551	*

Table 40. Parts list—Overall (continued)

<table>
<tr><th>No.</th><th>FRU</th><th>FRU no.</th><th>CRU ID</th></tr>
<tr><td>16</td><td>Blu-ray drive, 9.5 mm
• 2055-CTO, 8Tx, ATx
• 2056-CTO
• 2081-CTO
• 2082-CTO, 3Jx, 5Px, 6Rx, 6Zx, 84x
• 2083-CTO
• 2087-CTO
• 2088-CTO
• 2089-CTO
• 2241-CTO
• 2242-CTO
• 2243-CTO
• 2246-CTO
• 2247-CTO
• 2261-CTO
• 4058-CTO
• 4061-CTO, 42x, 46x, 4Bx, 4Vx, 67x
• 4062-CTO, 2Gx, 3Sx
• 4063-CTO, 2Ux
• 4064-CTO
• 4065-CTO</td><td>42T2559</td><td>*</td></tr>
<tr><td>16</td><td>Travel cover, 9.5 mm
• 2055-CTO, xxE, xxJ
• 2056-CTO, xxE, xxJ
• 2081-CTO, xxE, xxJ
• 2082-CTO, xxE, xxJ
• 2083-CTO, xxE, xxJ
• 2087-CTO, xxE, xxJ
• 2088-CTO, xxE, xxJ
• 2089-CTO, xxE, xxJ
• 2241-CTO, xxE, xxJ
• 2242-CTO, xxE, xxJ
• 2243-CTO, xxE, xxJ
• 2246-CTO, xxE, xxJ
• 2247-CTO, xxE, xxJ
• 2261-CTO, xxE, xxJ
• 4058-CTO, xxE, xxJ
• 4061-CTO, xxE, xxJ
• 4062-CTO, xxE, xxJ
• 4063-CTO, xxE, xxJ
• 4064-CTO, xxE, xxJ
• 4065-CTO, xxE, xxJ</td><td>13N5108</td><td>*</td></tr>
<tr><td>17</td><td>Hard disk drive cover assembly</td><td>43Y9743</td><td>*</td></tr>
<tr><td rowspan="3">18</td><td colspan="3">Base cover assembly for 2055</td></tr>
<tr><td>Worldwide
• 2055-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY</td><td>45M2508</td><td>N</td></tr>
<tr><td>Taiwan
• 2055-CTO, xxV</td><td>45M2528</td><td>N</td></tr>
</table>

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
18	Base cover assembly for 2056		
	Worldwide • 2056-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2509	N
	Taiwan • 2056-CTO, xxV	45M2529	N
18	Base cover assembly for 2081		
	Worldwide • 2081-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2505	N
	Taiwan • 2081-CTO, xxV	45M2525	N
18	Base cover assembly for 2082		
	Worldwide • 2082-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2506	N
	Taiwan • 2082-CTO, xxV	45M2526	N
18	Base cover assembly for 2083		
	Worldwide • 2083-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2510	N
	Taiwan • 2083-CTO, xxV	45M2530	N
18	Base cover assembly for 2087		
	Worldwide • 2087-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2511	N
	Taiwan • 2087-CTO, xxV	45M2531	N
18	Base cover assembly for 2088		
	Worldwide • 2088-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2507	N
	Taiwan • 2088-CTO, xxV	45M2527	N
18	Base cover assembly for 2089		
	Worldwide • 2089-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2515	N
	Taiwan • 2089-CTO, xxV	45M2535	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
18	Base cover assembly for 2241		
	Worldwide • 2241-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2516	N
	Taiwan • 2241-CTO, xxV	45M2536	N
18	Base cover assembly for 2242		
	Worldwide • 2242-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2512	N
	Taiwan • 2242-CTO, xxV	45M2532	N
18	Base cover assembly for 2243		
	Worldwide • 2243-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2513	N
	Taiwan • 2243-CTO, xxV	45M2533	N
18	Base cover assembly for 2246		
	Worldwide • 2246-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2517	N
	Taiwan • 2246-CTO, xxV	45M2537	N
18	Base cover assembly for 2247		
	Worldwide • 2247-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2518	N
	Taiwan • 2247-CTO	45M2538	N
18	Base cover assembly for 2261		
	Worldwide • 2261-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2514	N
	Taiwan • 2261-CTO, xxV	45M2534	N
18	Base cover assembly for 4058		
	Worldwide • 4058-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2519	N
	Taiwan • 4058-CTO, xxV	45M2539	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
18	Base cover assembly for 4061		
	Worldwide • 4061-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2521	N
	Taiwan • 4061-CTO, xxV	45M2541	N
18	Base cover assembly for 4062		
	Worldwide • 4062-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2521	N
	Taiwan • 4062-CTO, xxV	45M2540	N
18	Base cover assembly for 4063		
	Worldwide • 4063-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2522	N
	Taiwan • 4063-CTO, xxV	45M2542	N
18	Base cover assembly for 4064		
	Worldwide • 4064-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2523	N
	Taiwan • 4064-CTO, xxV	45M2543	N
18	Base cover assembly for 4065		
	Worldwide • 4065-CTO, xxA, xxB, xxC, xxE, xxF, xxG, xxH, xxJ, xxK, xxL, xxM, xxP, xxQ, xxS, xxT, xxU, xxY	45M2524	N
	Taiwan • 4065-CTO, xxV	45M2544	N
19	512-MB DDR3-1067 SDRAM SO-DIMM (PC3-8500) card • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	43R1775	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
19	1-GB DDR3-1067 SDRAM SO-DIMM (PC3-8500) card • 2055-CTO, 2Bx, 46x, 47x, 4Ax, 4Bx, 4Dx, 5Rx, 62x, 64x, 74x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 8Fx, 8Gx, 8Hx, 9Dx, 9Kx, 9Vx, 9Wx, A5x, A6x, AMx, ANx, APx, AQx, E2x • 2056-CTO, 34x, 4Kx, 4Px, 4Tx, 79x, E3x • 2081-CTO, 24x, 3Ex, 52x, 7Wx • 2082-CTO, 26x, 3Fx, 3Hx, 3Rx, 56x, 57x, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Rx, 5Xx, 5Yx, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Lx, 73x, 7Zx, 83x, 8Zx, 92x, 93x, 94x, 95x, 9Px, 9Qx, ACx, ADx, AFx, AGx, B9x, BAx, BBx, BEx, BHx, BKx, BMx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO, 44x • 2089-CTO, 2Hx, 2Jx, 2Lx, 2Qx, 2Rx, 2Sx, 2Ux, 2Vx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Px, 3Qx, 3Rx, 3Tx, 3Vx, 4Dx, 4Wx, 52x, 53x, 59x, 5Ax, 5Nx, 5Px, 5Qx, 5Wx, 5Xx, 5Zx, 6Gx, 6Hx, 6Lx, 6Mx, 6Nx, 6Qx, 82x, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, E1x • 2241-CTO, 3Wx, 3Yx, 3Zx, 42x, 5Sx, 5Tx, E1x, E2x • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 37x, 38x, 39x, 3Ax, 4Ex, 4Fx, 4Gx, 4Kx, 5Ex, 5Fx, 6Yx, 73x, 74x, 75x • 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Tx, 56x, 57x, 5Bx, 5Jx, 5Kx, 5Lx, 67x, 7Xx, 93x, 94x • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Gx, 4Vx • 4058-CTO, 22x • 4061-CTO, 4Px, 64x • 4062-CTO, 29x, 2Dx, 2Ex, 3Qx, 4Fx, 4Gx, 4Lx, 58x, 5Dx, 5Ex • 4063-CTO • 4064-CTO • 4065-CTO	43R1989	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
19	2-GB DDR3-1067 SDRAM SO-DIMM (PC3-8500) card • 2055-CTO, 2Cx, 2Dx, 2Ex, 2Lx, 2Mx, 2Nx, 2Px, 2Vx, 2Xx, 3Ax, 45x, 48x, 49x, 4Cx, 4Ex, 4Fx, 4Gx, 4Hx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 63x, 65x, 75x, 76x, 77x, 78x, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Tx, 8Ux, 9Ax, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, E1x, E2x, E3x • 2056-CTO, 4Qx, 4Rx, 4Sx, 5Tx, 63x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 53x, 7Wx, 9Mx • 2082-CTO, 27x, 28x, 3Gx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 52x, 53x, 54x, 55x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Px, 5Qx, 5Zx, 66x, 6Kx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 82x, 84x, 85x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 88x • 2089-CTO, 2Kx, 2Mx, 2Wx, 3Nx, 3Sx, 3Ux, 4Xx, 4Yx, 4Zx, 54x, 58x, 5Rx, 5Wx, 5Xx, 5Yx, 6Jx, 6Kx, 6Mx, 6Nx, 6Px, 79x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, E2x, E3x, E4x, E5x • 2241-CTO, 3Xx, 43x, 44x, 4Xx, 58x, 5Ux, 5Zx, E3x, E4x, E5x • 2242-CTO, 36x, 4Hx, 4Jx, 55x, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Px, 8Qx, 8Rx, 8Sx, BVx, BWx • 2243-CTO, 4Rx, 4Sx, 4Ux, 5Cx, 5Dx, 5Fx, 5Mx, 62x, 63x, 64x, 65x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2261-CTO, 2Dx, 3Ex, 3Fx, 7Zx • 4058-CTO, 23x, 3Lx, 4Sx • 4061-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Zx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Px, 4Qx, 4Rx, 4Ux, 4Vx, 4Wx, 4Zx, 52x, 53x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 2Ax, 2Bx, 2Cx, 2Fx, 2Gx, 2Xx, 2Yx, 35x, 36x, 37x, 3Ax, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 54x, 55x, 56x, 57x, 58x, 59x, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Tx, 2Ux, 33x, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	43R1969	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
19	4-GB DDR3-1067 SDRAM SO-DIMM (PC3-8500) card • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	51J0494	**
20	System board assembly, Intel Integrated graphics 4500MHD, non-AMT, TPM for T500 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO	60Y3769	N
20	System board assembly, Intel Integrated graphics 4500MHD, non-AMT, non-TPM for T500 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO	60Y3768	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
20	System board assembly, Intel Integrated graphics 4500MHD, AMT, TPM for T500 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Qx, 2Rx, 2Sx, 2Ux, 2Vx, 2Wx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 4Dx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 59x, 5Ax, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 7Kx, 7Qx, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, E1x, E2x, E3x, E4x, E5x • 2241-CTO, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Zx, E1x, E2x, E3x, E4x, E5x • 2242-CTO • 2243-CTO, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 9Fx, 9Gx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx, 7Zx	60Y3771	N
20	System board assembly, Intel Integrated graphics 4500MHD, AMT, non-TPM • 2089-CTO, 5Nx, 5Px, 5Qx, 5Rx • 2241-CTO, 5Sx, 5Tx, 5Ux • 2242-CTO • 2243-CTO, 5Lx • 2246-CTO • 2247-CTO • 2261-CTO	60Y3770	N
20	System board assembly, Intel Integrated graphics 4500MHD, non-AMT, TPM, non-vPro for T500 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2088-CTO • 2089-CTO, 79x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx • 2241-CTO • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Fx, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 56x, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, BXx, BYx • 2261-CTO	60Y3763	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
20	System board assembly, Intel Integrated graphics 4500MHD, non-AMT, non-TPM, non-vPro for T500 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 8Px • 2243-CTO, 4Ux, 5Jx, 5Kx, 5Mx, 6Dx, 6Ex, 6Fx, 7Bx, 7Cx, 7Dx • 2261-CTO	60Y3762	N
20	System board assembly, AMD M86 256 MB, non-AMT, TPM for T500 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO	60Y3773	N
20	System board assembly, AMD M86 256 MB, non-AMT, non-TPM for T500 • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO	60Y3772	N
20	System board assembly, AMD M86 256 MB, AMT, TPM for T500 • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Ex, 2Lx, 2Mx, 2Nx, 2Px, 2Vx, 2Xx, 3Ax, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 63x, 65x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Tx, 9Dx, 9Kx, 9Lx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, E1x, E2x, E3x • 2056-CTO, 34x, 4Kx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 5Tx, 63x, 7Ax, 7Lx, E1x, E2x, E3x • 2081-CTO • 2082-CTO, 7Rx, 7Sx, 7Tx, 7Ux, 86x, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B7x, B8x, B9x, BAx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BTx, BUx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x •	60Y3775	N
20	System board assembly, AMD M86 256 MB, AMT, non-TPM for T500 • 2055-CTO, 64x, 74x, 75x, 76x, 77x, 78x • 2056-CTO, 79x, 7Ax, 7Bx, 7Cx • 2081-CTO • 2082-CTO, 5Px, 6Sx, 6Tx, 6Vx, 6Zx, 72x, 73x, 7Zx, 97x, 98x • 2089-CTO • 2242-CTO	60Y3774	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
20	System board assembly, AMD M86 256 MB, non-AMT, TPM, non-vPro for T500 • 2055-CTO, 8Ux, 9Ax, 9Bx, 9Cx, AHx, AJx • 2056-CTO • 2081-CTO, 22x, 24x, 3Ex, 52x, 53x, 7Wx • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Xx, 5Yx, 5Zx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Vx, 7Xx, 7Yx, 85x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 9Fx, 9Gx, 9Hx, 9Jx, 9Px, 9Qx, B5x, B6x, BKx, BMx, BNx, BPx, BQx, BRx, BSx • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO, 97x, 98x • 2261-CTO	60Y3765	N
20	System board assembly, AMD M86 256 MB, non-AMT, non-TPM, non-vPro for T500 • 2055-CTO • 2056-CTO • 2081-CTO, 9Mx • 2082-CTO, 5Qx, 5Rx, 6Rx, 6Ux, 6Wx, 6Xx, 6Yx, 82x, 83x, 84x, 99x, 9Ex, 9Nx, BBx • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 8Qx, 8Rx • 2243-CTO, 7Mx, 7Nx, 7Px • 2261-CTO	60Y3764	N
20	System board assembly, AMD M86GL-M 512 MB, non-AMT, TPM for W500 • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	60Y3777	N
20	System board assembly, AMD M86GL-M 512 MB, non-AMT, non-TPM for W500 • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	60Y3776	N
20	System board assembly, AMD M86GL-M 512 MB, AMT, TPM for W500 • 4058-CTO • 4061-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Zx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Px, 4Ux, 4Vx, 4Wx, 4Zx, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Gx, 6Hx, 6Lx • 4062-CTO, 3Nx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 62x, 63x • 4063-CTO, 2Tx, 2Ux, 33x, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4064-CTO, 2Wx	60Y3779	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
20	System board assembly, AMD M86GL-M 512 MB, AMT, non-TPM for W500 • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	60Y3778	N
20	System board assembly, AMD M86GL-M 512 MB, non-AMT, TPM, non-vPro for W500 • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 4Qx, 4Rx, 52x, 53x, 6Ex, 6Fx, 6Jx, 6Kx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Xx, 2Yx, 35x, 36x, 37x, 3Ax, 3Bx, 3Cx, 3Jx, 3Kx, 3Mx, 3Px, 3Qx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 54x, 55x, 56x, 58x, 59x, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx • 4063-CTO • 4064-CTO • 4065-CTO	60Y3767	N
20	System board assembly, AMD M86GL-M 512 MB, non-AMT, non-TPM, non-vPro for W500 • 4058-CTO • 4061-CTO • 4062-CTO, 3Gx, 3Hx, 3Rx, 3Sx, 57x • 4063-CTO • 4064-CTO • 4065-CTO	60Y3766	N
21	CPU assembly, Intel® Celeron® processor 900 (2.2 GHz) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	43R0795	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Celeron Dual Core processor T1600 (1.66 GHz) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 6Qx • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W8148	N
21	CPU assembly, Intel Celeron Dual Core processor T1700 (1.83 GHz) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W8147	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Celeron Dual Core processor T3000 (1.8 GHz) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	43R0894	N
21	CPU assembly, Intel Celeron Dual Core processor T3100 (1.9 GHz) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	45M2815	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel® Core™ 2 Duo mobile processor P7370 (2.0 GHz) • 2055-CTO, 7Ex, 7Fx • 2056-CTO • 2081-CTO • 2082-CTO, 7Dx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 5Vx, 6Rx, 6Sx • 2243-CTO, 6Xx, 76x • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W8149	N
21	CPU assembly, Intel Core 2 Duo mobile processor P8400 (2.26 GHz) • 2055-CTO, 48x, 4Bx, 5Rx, 5Sx, 62x, 64x, 9Lx, A3x, A4x, A5x, A6x • 2056-CTO, 34x, 4Kx • 2081-CTO, 9Mx • 2082-CTO, 26x, 3Fx, 3Hx, 3Nx, 6Vx, 9Nx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, BCx, BDx, BEx, BJx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO, 44x • 2089-CTO, 2Hx, 2Jx, 2Qx, 2Vx, 2Yx, 3Kx, 3Lx, 3Px, 3Qx, 3Rx, 3Tx, 4Dx, 4Wx, 59x, 7Qx, 8Nx • 2241-CTO, 3Wx, 3Zx, 5Sx, E1x • 2242-CTO, 22x, 26x, 28x, 32x, 33x, 35x, 37x, 38x, 3Ax, 4Ex, 4Fx, 4Kx, 5Ex, 5Fx, 5Gx, 5Hx, 7Ux, 7Vx, 8Px • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Rx, 5Dx, 5Jx, 5Kx, 5Lx, 7Rx, 7Sx, 7Xx, 7Yx, BXx, BYx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx, 3Dx, 3Gx, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W7984	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor P8400 (2.26 GHz), R-0 • 2055-CTO, 48x, 4Bx, 5Rx, 5Sx, 62x, 64x, 9Lx, A3x, A4x, A5x, A6x • 2056-CTO, 34x, 4Kx • 2081-CTO, 9Mx • 2082-CTO, 26x, 3Fx, 3Hx, 3Nx, 6Vx, 9Nx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, BCx, BDx, BEx, BJx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO, 44x • 2089-CTO, 2Hx, 2Jx, 2Qx, 2Vx, 2Yx, 3Kx, 3Lx, 3Px, 3Qx, 3Rx, 3Tx, 4Dx, 4Wx, 59x, 7Qx, 8Nx • 2241-CTO, 3Wx, 3Zx, 5Sx, E1x • 2242-CTO, 22x, 26x, 28x, 32x, 33x, 35x, 37x, 38x, 3Ax, 4Ex, 4Fx, 4Kx, 5Ex, 5Fx, 5Gx, 5Hx, 7Ux, 7Vx, 8Px • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Rx, 5Dx, 5Jx, 5Kx, 5Lx, 7Rx, 7Sx, 7Xx, 7Yx, BXx, BYx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx, 3Dx, 3Gx, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W8286	N
21	CPU assembly, Intel Core 2 Duo mobile processor P8600 (2.40 GHz) • 2055-CTO, 2Lx, 2Mx, 47x, 49x, 4Ax, 4Dx, 4Ex, 65x, 76x, 7Gx, 7Hx, 7Kx, 8Qx • 2056-CTO, 7Lx • 2081-CTO, 52x • 2082-CTO, 3Lx, 3Mx, 52x, 53x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Qx, 6Lx, 6Tx, 6Ux, 6Wx, 6Yx, 72x, 7Mx, 7Nx, 7Px, 7Qx, 7Vx, 7Yx, 8Zx, 92x, 97x, BFx, BGx, BHx • 2083-CTO • 2087-CTO • 2088-CTO, 3Yx • 2089-CTO, 2Rx, 2Sx, 2Wx, 2Xx, 3Nx, 3Sx, 3Vx, 4Yx, 4Zx, 52x, 53x, 5Ax, 5Nx, 5Px, 5Wx, 5Xx, 5Yx, E3x, E5x • 2241-CTO, 43x, 5Zx, E4x • 2242-CTO, 24x, 25x, 27x, 36x, 39x, 4Gx, 4Jx, 66x, 6Bx, 6Cx, 6Yx, 6Zx, 72x, 73x, 8Qx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 4Sx, 4Tx, 5Fx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 77x, 78x, 7Ax, 7Bx, 7Px, 8Wx, 8Xx, 8Yx, 93x, 94x, 95x, 96x, 97x, 98x • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 2Ex, 2Gx, 3Ex, 3Fx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W7985	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor P8600 (2.40 GHz), R-0 • 2055-CTO, 2Lx, 2Mx, 47x, 49x, 4Ax, 4Dx, 4Ex, 65x, 76x, 7Gx, 7Hx, 7Kx, 8Qx • 2056-CTO, 7Lx • 2081-CTO, 52x • 2082-CTO, 3Lx, 3Mx, 52x, 53x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Qx, 6Lx, 6Tx, 6Ux, 6Wx, 6Yx, 72x, 7Mx, 7Nx, 7Px, 7Qx, 7Vx, 7Yx, 8Zx, 92x, 97x, BFx, BGx, BHx • 2083-CTO • 2087-CTO • 2088-CTO, 3Yx • 2089-CTO, 2Rx, 2Sx, 2Wx, 2Xx, 3Nx, 3Sx, 3Vx, 4Yx, 4Zx, 52x, 53x, 5Ax, 5Nx, 5Px, 5Wx, 5Xx, 5Yx, E3x, E5x • 2241-CTO, 43x, 5Zx, E4x • 2242-CTO, 24x, 25x, 27x, 36x, 39x, 4Gx, 4Jx, 66x, 6Bx, 6Cx, 6Yx, 6Zx, 72x, 73x, 8Qx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 4Sx, 4Tx, 5Fx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 77x, 78x, 7Ax, 7Bx, 7Px, 8Wx, 8Xx, 8Yx, 93x, 94x, 95x, 96x, 97x, 98x • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 2Ex, 2Gx, 3Ex, 3Fx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W8287	N
21	CPU assembly, Intel Core 2 Duo mobile processor P8700 (2.53 GHz) • 2055-CTO, 7Lx, 89x, 8Ex, 8Fx, 8Gx, 8Jx, 8Nx, 8Rx, 9Bx, 9Cx, 9Dx, 9Kx, 9Rx, AMx, ANx, AUx • 2056-CTO • 2081-CTO • 2082-CTO, 85x, 8Vx, 8Wx, 8Xx, 8Yx, 98x, B7x, B8x, BBx, BKx, BMx, BPx, BQx, BTx, BUx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 5Zx, 6Gx, 6Jx, 6Kx, 6Mx, 6Nx, 6Px, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 82x, 8Dx, 8Ex, 8Fx, E4x • 2241-CTO, E5x • 2242-CTO, 7Lx, 8Rx • 2243-CTO, 6Tx, 6Ux, 6Vx, 6Wx, 7Cx, 7Nx, 7Wx, 8Tx, 8Ux, 8Vx, 8Zx, 92x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx • 2246-CTO • 2247-CTO • 2261-CTO, 7Zx • 4058-CTO • 4061-CTO, 49x • 4062-CTO, 54x, 55x, 56x • 4063-CTO • 4064-CTO • 4065-CTO	42W8194	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor P8800 (2.66 GHz) • 2055-CTO, 9Tx, 9Ux, 9Vx, 9Wx, A7x, A9x, APx, AQx, ARx, AVx, AWx, AXx, AYx, AZx • 2056-CTO • 2081-CTO • 2082-CTO, 9Px, 9Qx, B9x, BAx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 83x, 84x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx • 2241-CTO • 2242-CTO • 2243-CTO, • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO, 5Qx, 5Rx, 5Sx, 5Tx • 4063-CTO • 4064-CTO • 4065-CTO	45M2814	N
21	CPU assembly, Intel Core 2 Duo mobile processor P9500 (2.53 GHz) • 2055-CTO, 2Xx, 4Cx, 4Fx • 2056-CTO • 2081-CTO, 22x, 24x • 2082-CTO, 28x, 3Jx, 3Kx, 5Px, 6Rx, 6Sx, 6Zx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 42x • 2089-CTO, 3Ux • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Jx, 2Lx, 2Mx • 4062-CTO, 2Xx, 2Yx, 36x, 3Hx • 4063-CTO • 4064-CTO • 4065-CTO	42W7986	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor P9500 (2.53 GHz), E-0 • 2055-CTO, 2Xx, 4Cx, 4Fx • 2056-CTO • 2081-CTO, 22x, 24x • 2082-CTO, 28x, 3Jx, 3Kx, 5Px, 6Rx, 6Sx, 6Zx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 42x • 2089-CTO, 3Ux • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Jx, 2Lx, 2Mx • 4062-CTO, 2Xx, 2Yx, 36x, 3Hx • 4063-CTO • 4064-CTO • 4065-CTO	42W8288	N
21	CPU assembly, Intel Core 2 Duo mobile processor P9600 (2.80 GHz) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO, 99x • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 3Tx • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W8198	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor P9700 (2.80 GHz) • 2055-CTO, ASx, ATx • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 64x, 65x, 69x • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	45M2830	N
21	CPU assembly, Intel Core 2 Duo mobile processor T5670 (1.8 GHz) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Xx, 5Yx, 5Zx, 66x, 67x, 68x, 69x, 6Ax, 6Bx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO, 4Hx • 2243-CTO, 4Px, 4Qx, 4Ux, 56x, 57x, 5Bx, 5Cx, 5Mx • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	43N7741	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor T5870 (2.0 GHz) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO, 5Mx, 5Nx, 5Rx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 73x • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO, 6Dx, 6Ex • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	43N7739	N
21	CPU assembly, Intel Core 2 Duo mobile processor T6570 (2.1 GHz) • 2055-CTO • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W8193	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor T9400 (2.53 GHz) • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Ex, 2Nx, 2Px, 2Vx, 45x, 46x, 4Gx, 5Tx, 5Ux, 5Vx, 5Wx, 63x, 74x, 75x, 77x, 7Jx, 9Sx, B4x, E1x, E3x • 2056-CTO, 4Px, 4Qx, 4Rx, 4Tx, 5Tx, 63x, 79x, 7Ax, 7Bx, E1x, E2x • 2081-CTO, 3Ex • 2082-CTO, 27x, 3Gx, 3Rx, 54x, 55x, 6Jx, 6Kx, 6Mx, 6Nx, 6Px, 6Qx, 6Xx, 7Xx, 93x, 94x, 95x, 96x • 2083-CTO • 2087-CTO • 2088-CTO, 3Zx • 2089-CTO, 2Kx, 2Lx, 2Mx, 2Ux, 3Hx, 3Jx, 3Mx, 4Xx, 54x, 58x, 5Qx, 5Rx, E1x, E2x • 2241-CTO, 3Xx, 3Yx, 42x, 44x, 4Xx, 58x, 5Tx, 5Ux, E2x, E3x • 2242-CTO, 23x, 34x, 55x, 74x, 75x • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 22x • 4061-CTO, 2Hx, 2Nx, 2Zx, 3Dx, 3Fx • 4062-CTO, 29x, 2Dx, 2Ex, 35x, 3Ax, 3Cx, 3Gx, 3Jx, 3Kx, 4Fx, 58x • 4063-CTO, 2Tx, 33x, 3Fx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42W7987	N
21	CPU assembly, Intel Core 2 Duo mobile processor T9400 (2.53 GHz), E-0 • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Ex, 2Nx, 2Px, 2Vx, 45x, 46x, 4Gx, 5Tx, 5Ux, 5Vx, 5Wx, 63x, 74x, 75x, 77x, 7Jx, 9Sx, B4x, E1x, E3x • 2056-CTO, 4Px, 4Qx, 4Rx, 4Tx, 5Tx, 63x, 79x, 7Ax, 7Bx, E1x, E2x • 2081-CTO, 3Ex • 2082-CTO, 27x, 3Gx, 3Rx, 54x, 55x, 6Jx, 6Kx, 6Mx, 6Nx, 6Px, 6Qx, 6Xx, 7Xx, 93x, 94x, 95x, 96x • 2083-CTO • 2087-CTO • 2088-CTO, 3Zx • 2089-CTO, 2Kx, 2Lx, 2Mx, 2Ux, 3Hx, 3Jx, 3Mx, 4Xx, 54x, 58x, 5Qx, 5Rx, E1x, E2x • 2241-CTO, 3Xx, 3Yx, 42x, 44x, 4Xx, 58x, 5Tx, 5Ux, E2x, E3x • 2242-CTO, 23x, 34x, 55x, 74x, 75x • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 22x • 4061-CTO, 2Hx, 2Nx, 2Zx, 3Dx, 3Fx • 4062-CTO, 29x, 2Dx, 2Ex, 35x, 3Ax, 3Cx, 3Gx, 3Jx, 3Kx, 4Fx, 58x • 4063-CTO, 2Tx, 33x, 3Fx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42W8289	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor T9550 (2.66 GHz) • 2055-CTO, 8Ax, 8Bx, 8Cx, 8Dx, 8Hx, 8Kx, 8Px, 8Sx • 2056-CTO • 2081-CTO, 7Wx • 2082-CTO, 7Rx, 7Sx, 7Tx, 7Ux, 7Zx, 86x, 87x, 99x, 9Ex • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 6Hx, 6Lx • 2241-CTO • 2242-CTO, 25x • 2243-CTO, 6Fx, 7Dx, 7Mx • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 3Lx • 4061-CTO, 3Ux, 3Wx, 3Xx, 3Yx, 43x, 44x, 48x, 4Ax • 4062-CTO, 3Mx, 3Qx, 3Rx, 3Sx, 59x • 4063-CTO • 4064-CTO • 4065-CTO	42W8195	N
21	CPU assembly, Intel Core 2 Duo mobile processor T9600 (2.80 GHz) • 2055-CTO, 3Ax, 4Hx, 78x, 8Ux, 9Ax, AHx, AJx, AKx, ALx, E2x • 2056-CTO, 4Sx, 7Cx, E3x • 2081-CTO, 53x • 2082-CTO, 9Fx, 9Gx, 9Hx, 9Jx, B5x, B6x, BNx, BRx, BSx • 2083-CTO • 2087-CTO • 2088-CTO, 43x • 2089-CTO, 79x, 7Ex • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 23x, 4Sx • 4061-CTO, 2Kx, 2Px, 2Qx, 2Rx, 2Sx, 32x, 38x, 39x, 3Ex, 4Px, 4Rx, 4Ux, 53x, 68x, 6Ax, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 2Ax, 2Bx, 2Cx, 2Fx, 2Gx, 37x, 3Bx, 4Dx, 4Ex, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Xx, 4Yx, 57x, 5Cx, 5Dx, 5Hx, 5Jx, 5Nx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Ux, 34x • 4064-CTO • 4065-CTO	42W7988	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor T9600 (2.80 GHz), E-0 • 2055-CTO, 3Ax, 4Hx, 78x, 8Ux, 9Ax, AHx, AJx, AKx, ALx, E2x • 2056-CTO, 4Sx, 7Cx, E3x • 2081-CTO, 53x • 2082-CTO, 9Fx, 9Gx, 9Hx, 9Jx, B5x, B6x, BNx, BRx, BSx • 2083-CTO • 2087-CTO • 2088-CTO, 43x • 2089-CTO, 79x, 7Ex • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 23x, 4Sx • 4061-CTO, 2Kx, 2Px, 2Qx, 2Rx, 2Sx, 32x, 38x, 39x, 3Ex, 4Px, 4Rx, 4Ux, 53x, 68x, 6Ax, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 2Ax, 2Bx, 2Cx, 2Fx, 2Gx, 37x, 3Bx, 4Dx, 4Ex, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Xx, 4Yx, 57x, 5Cx, 5Dx, 5Hx, 5Jx, 5Nx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Ux, 34x • 4064-CTO • 4065-CTO	42W8290	N
21	CPU assembly, Intel Core 2 Duo mobile processor T9800 (2.93 GHz) • 2055-CTO, 8Lx, 8Mx, 8Tx, B2x, B3x • 2056-CTO • 2081-CTO • 2082-CTO, 82x, 83x, 84x • 2083-CTO • 2087-CTO • 2088-CTO, 88x • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 3Vx, 3Zx, 42x, 45x, 46x, 47x, 4Bx, 4Qx, 4Zx, 52x, 6Hx, 6Jx • 4062-CTO, 3Nx, 3Px • 4063-CTO, 4Cx • 4064-CTO • 4065-CTO	42W8196	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
21	CPU assembly, Intel Core 2 Duo mobile processor T9900 (3.06 GHz) • 2055-CTO, 9Xx, 9Yx, 9Zx, A2x, A8x • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 85x, 86x • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 4Vx, 4Wx, 66x, 67x, 6Bx • 4062-CTO, 4Tx, 5Ex, 5Fx, 5Gx, 5Kx, 5Lx, 5Mx, 5Px • 4063-CTO • 4064-CTO • 4065-CTO	42W8197	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
22	ExpressCard/PC Card slot • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Ex, 2Lx, 2Mx, 2Nx, 2Px, 3Ax, 45x, 46x, 47x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Fx, 4Gx, 4Hx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 63x, 64x, 65x, 74x, 75x, 76x, 77x, 78x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Tx, 8Ux, 9Ax, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, B2x, B3x, B4x, E1x, E2x • 2056-CTO, 4Kx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 5Tx, 63x, 79x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 3Ex, 52x, 53x, 7Wx, 9Mx • 2082-CTO, 26x, 27x, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Xx, 5Yx, 5Zx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Qx, 2Rx, 2Sx, 2Ux, 2Vx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Tx, 3Ux, 3Vx, 4Dx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 59x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 79x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Nx, E1x, E2x, E3x, E4x • 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Sx, 5Tx, 5Ux, 5Zx, E1x, E2x, E3x, E4x, E5x • 2242-CTO, 22x, 23x, 26x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Fx, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Sx, BVx, BWx • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx • 4058-CTO, 22x, 3Lx • 4061-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Px, 2Qx, 2Rx, 2Sx, 2Zx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Ux, 3Vx, 3Wx, 3Yx, 3Zx, 43x, 45x, 47x, 48x, 49x, 4Ax, 4Bx, 4Px, 4Ux, 4Wx, 4Zx, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx • 4062-CTO, 24x, 25x, 26x, 27x, 2Gx, 2Xx, 2Yx, 35x, 36x, 37x, 3Ax, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Nx, 3Px, 3Rx, 3Sx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Nx, 4Tx, 4Yx, 54x, 55x, 58x, 59x, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Vx, 5Xx, 5Zx, 63x • 4063-CTO, 2Tx, 2Ux, 33x, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42W3436	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
22	ExpressCard/Smart Card slot • 2055-CTO, 2Vx, 2Xx, 48x, 4Ex, 8Lx, AYx, AZx, E3x • 2056-CTO, 34x • 2081-CTO, 22x, 24x • 2082-CTO, 28x • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx • 2089-CTO, 2Wx, 3Sx, 8Lx, 8Mx, E5x • 2241-CTO • 2242-CTO, 24x, 25x, 27x, 8Px, 8Qx, 8Rx • 2243-CTO, 2Bx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 7Zx • 4058-CTO, 23x, 4Sx • 4061-CTO, 2Mx, 2Nx, 3Xx, 42x, 44x, 46x, 4Qx, 4Rx, 4Vx, 52x, 53x, 6Kx, 6Lx • 4062-CTO, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 3Mx, 3Qx, 4Mx, 4Xx, 56x, 57x, 5Sx, 5Tx, 5Ux, 5Wx, 5Yx, 62x • 4063-CTO • 4064-CTO • 4065-CTO	42X4992	N
22	PC Card/Smart Card slot • 2055-CTO, 2Vx, 2Xx, 48x, 4Ex, 8Lx, AYx, AZx, E3x • 2056-CTO, 34x • 2081-CTO, 22x, 24x • 2082-CTO, 28x • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx • 2089-CTO, 2Wx, 3Sx, 8Lx, 8Mx, E5x • 2241-CTO • 2242-CTO, 24x, 25x, 27x, 8Px, 8Qx, 8Rx • 2243-CTO, 2Bx • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 7Zx • 4058-CTO, 23x, 4Sx • 4061-CTO, 2Mx, 2Nx, 3Xx, 42x, 44x, 46x, 4Qx, 4Rx, 4Vx, 52x, 53x, 6Kx, 6Lx • 4062-CTO, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 3Mx, 3Qx, 4Mx, 4Xx, 56x, 57x, 5Sx, 5Tx, 5Ux, 5Wx, 5Yx, 62x • 4063-CTO • 4064-CTO • 4065-CTO	45M2418	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
23	Qualcomm® UNDP1 - Wireless WAN card • 2055-CTO, 2Ex • 2056-CTO • 2081-CTO • 2082-CTO, BMx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Lx • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO • 4062-CTO, 5Fx • 4063-CTO • 4064-CTO • 4065-CTO	42T0961	**
23	Ericsson F3507g USA - Wireless WAN card • 2055-CTO, AKx, ALx • 2056-CTO • 2081-CTO • 2082-CTO, 26x, 27x, 95x • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 3Jx, 8Fx • 2241-CTO • 2242-CTO, 22x, 23x, 32x, 4Ex • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 6Ax, 6Bx • 4062-CTO, 24x, 25x, 4Hx • 4063-CTO • 4064-CTO • 4065-CTO	43Y6537	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
23	Ericsson F3507g Other - Wireless WAN card • 2055-CTO, 5Vx, 7Hx, 8Cx, 8Gx, 8Mx, 9Ax, 9Cx, 9Wx, 9Yx, A2x, AXx, AZx, B3x • 2056-CTO • 2081-CTO • 2082-CTO, 52x, 54x, 5Ax, 6Nx, 6Qx, 7Nx, 7Qx, 7Sx, 7Ux, 86x, 87x, 8Wx, 8Yx, 9Fx, 9Hx, 9Qx, B9x, BAx, BQx, BSx, BUx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 4Dx, 4Yx, 5Xx, 6Jx, 6Nx, 7Ex, 7Gx, 7Jx, 83x, 86x, 88x, 8Ax, 8Gx, 8Jx, 8Lx • 2241-CTO • 2242-CTO • 2243-CTO, 4Ex, 4Mx, 63x, 65x, 6Ux, 6Wx, 9Ex, 9Gx, BYx • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 43x, 47x, 4Ux, 4Wx • 4062-CTO, 3Cx, 3Jx, 3Nx, 4Dx, 4Mx, 4Tx, 4Xx, 55x, 56x, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Sx, 5Tx, 5Ux, 5Wx, 5Yx, 62x • 4063-CTO • 4064-CTO • 4065-CTO	43Y6513	**
24	Thermal device and fan (Integrated) • 2089-all • 2241-all • 2242-all • 2243-all • 2246-all • 2247-all • 2261-all	45N5490	N
24	Thermal device and fan (Discrete) • 2055-all • 2056-all • 2083-all • 2087-all • 2081-all • 2082-all • 2088-all • 4058-all • 4061-all • 4062-all • 4063-all • 4064-all • 4065-all	45N5492	N

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
25	Palm rest assembly without fingerprint reader • 2055-CTO, 2Vx, 4Bx, 4Cx, 4Dx, E3x • 2056-CTO • 2081-CTO, 9Mx • 2082-CTO, 5Ex, 5Xx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Vx, 3Tx, 3Ux, 3Vx, 6Qx, 7Fx, 7Gx, 7Hx, 7Jx, 87x, 88x, 89x, 8Ax, E5x • 2241-CTO • 2242-CTO, 4Ex, 4Fx, 5Fx, 6Yx, 8Px • 2243-CTO, 4Px, 4Qx, 56x, 57x • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 4R, 53, 6Kx • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	44C0662	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
25	Palm rest assembly with fingerprint reader • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Ex, 2Lx, 2Mx, 2Nx, 2Px, 2Xx, 3Ax, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Ex, 4Fx, 4Gx, 4Hx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 63x, 64x, 65x, 74x, 75x, 76x, 77x, 78x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Rx, 8Sx, 8Tx, 8Ux, 9Ax, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, A6x, A7x, A8x, A9x, AHx, AJx, AKx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, E1x, E2x • 2056-CTO, 34x, 4Kx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 5Tx, 63x, 79x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 3Ex, 52x, 53x, 7Wx • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 58x, 59x, 5Ax, 5Bx, 5Cx, 5Dx, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Yx, 5Zx, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 6Rx, 6Sx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 6Yx, 6Zx, 72x, 73x, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 7Zx, 82x, 83x, 84x, 85x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ex, 9Fx, 9Gx, 9Hx, 9Jx, 9Nx, 9Px, 9Qx, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B5x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Qx, 2Rx, 2Sx, 2Ux, 2Wx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 4Dx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 59x, 5Ax, 5Nx, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 79x, 7Ex, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, E1x, E2x, E3x, E4x • 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Sx, 5Tx, 5Ux, 5Zx, E1x, E2x, E3x, E4x, E5x • 2242-CTO, 22x, 23x, 24x, 25x, 26x, 27x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 39x, 3Ax, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Gx, 5Hx, 5Vx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Qx, 8Rx, 8Sx, BVx, BWx • 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Rx, 4Sx, 4Tx, 4Ux, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Mx, 7Nx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Tx, 8Ux, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 97x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Dx, 2Ex, 2Fx, 2Gx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx, 7Zx • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Nx, 2Px, 2Qx, 2Rx, 2Sx, 2Zx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Ux, 3Vx, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Px, 4Qx, 4Ux, 4Vx, 4Wx, 4Zx, 52x, 64x, 65x, 66x, 67x, 68x, 69x, 6Ax, 6Bx, 6Cx, 6Dx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 29x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Xx, 2Yx, 35x, 36x, 37x, 3Ax, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 4Jx, 4Kx, 4Lx, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 54x, 55x, 56x, 57x, 58x, 59x, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Hx, 5Jx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Tx, 2Ux, 33x, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	44C0664	**

Table 40. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID
26	Keyboard (see "Keyboard" on page 237.)		
27	TrackPoint stick caps	91P9642	*
—	Thermal grease	91P8835	N
—	Telephone cable, RoHS	91P6915	*
—	AC adapter (see "AC adapters" on page 241.)		

LCD FRUs

In ThinkPad T500 and W500, there are following types of LCDs.

- 15.4-in. WXGA TFT LCD (Table 41 on page 220)
- 15.4-in. WSXGA+ TFT LCD (Table 42 on page 229)
- 15.4-in. WUXGA TFT LCD (Table 43 on page 233)

Table 41. Parts list—15.4-in. WXGA TFT

No.	FRU	FRU no.	CRU ID
1	LCD cover kit	43Y9735	N
2	Integrated camera • 2055-CTO, 48x, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 64x, 7Fx, 7Gx, 7Hx, 7Jx, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Nx, 8Qx, 8Rx, 8Sx, 8Tx, 9Dx, 9Lx, 9Rx, 9Vx, 9Wx, A3x, A4x, A5x, A6x, A7x, AMx, APx, ARx, ASx, AUx • 2056-CTO, 5Tx • 2081-CTO, 9Mx • 2082-CTO, 3Mx, 3Nx, 58x, 5Cx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Yx, 5Zx, 67x, 6Dx, 6Mx, 6Nx, 6Px, 6Qx, 6Ux, 6Vx, 6Zx, 72x, 73x, 7Zx, 82x, 85x, 9Ex, 9Nx, 9Px, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B7x, B8x, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Kx, 2Mx, 3Hx, 3Kx, 3Mx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 4Wx, 4Xx, 5Qx, 5Rx, 6Lx, 7Hx, 7Jx, 82x, 89x, 8Ax, 8Dx, 8Ex, 8Fx, 8Nx, E1x, E2x, E3x, E4x • 2241-CTO, 3Xx, 3Yx, 3Zx, 42x, 44x, 4Xx, 5Tx, 5Ux, E1x, E2x, E3x, E4x, E5x • 2242-CTO, 23x, 34x, 3Ax, 4Gx, 4Hx, 4Jx, 55x, 5Ex, 5Vx, 66x, 6Cx, 6Rx, 6Sx, 73x, 74x, 75x, 7Lx, 7Vx, 8Qx, BVx, BWx • 2243-CTO, 3Bx, 3Cx, 4Dx, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 5Bx, 5Cx, 5Fx, 5Jx, 5Mx, 62x, 63x, 64x, 65x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 78x, 7Ax, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 3Gx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T3634	N
3	Wireless LAN/WAN/wireless USB antenna assembly	44C5386	N
3	Wireless LAN/WAN/wireless USB antenna assembly	44C5387	N
4	LCD magnesium structure frame assembly	43Y9736	N
5	LCD cable assembly	44C5385	N
6	Hinge assembly	43Y9737	N
6	Hinge assembly	43Y9738	N

Table 41. Parts list—15.4-in. WXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
7	Inverter card • 2055-CTO, 2Lx, 2Nx, 48x, 7Lx, 8Ax, 8Nx, A3x, A4x, A5x, A6x, AUx • 2056-CTO • 2081-CTO, 9Mx • 2082-CTO, 3Mx, 3Nx, 58x, 5Xx, 5Yx, 5Zx, 66x, 67x, 6Cx, 6Dx, 6Ux, 6Vx, 97x, 98x, 9Ex, 9Nx, AEx, AFx, AGx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Rx, 2Vx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 58x, 59x, 5Ax, 5Nx, 5Qx, 5Wx, 5Xx, 5Zx, 6Mx, 6Nx, 6Qx, 8Nx, E1x, E2x • 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 58x, 5Sx, 5Tx, E1x, E2x, E3x • 2242-CTO, 22x, 23x, 26x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 3Ax, 4Ex, 4Fx, 55x, 5Ex, 5Fx, 5Vx, 8Px • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 7Xx, 7Yx, 8Wx, 8Xx, 8Yx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	41W1338	N
7	Inverter card • 2055-CTO, 2Lx, 2Nx, 48x, 7Lx, 8Ax, 8Nx, A3x, A4x, A5x, A6x, AUx • 2056-CTO • 2081-CTO, 9Mx • 2082-CTO, 3Mx, 3Nx, 58x, 5Xx, 5Yx, 5Zx, 66x, 67x, 6Cx, 6Dx, 6Ux, 6Vx, 97x, 98x, 9Ex, 9Nx, AEx, AFx, AGx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Rx, 2Vx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 58x, 59x, 5Ax, 5Nx, 5Qx, 5Wx, 5Xx, 5Zx, 6Mx, 6Nx, 6Qx, 8Nx, E1x, E2x • 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 58x, 5Sx, 5Tx, E1x, E2x, E3x • 2242-CTO, 22x, 23x, 26x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 3Ax, 4Ex, 4Fx, 55x, 5Ex, 5Fx, 5Vx, 8Px • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 7Xx, 7Yx, 8Wx, 8Xx, 8Yx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	13R1015	N

Table 41. Parts list—15.4-in. WXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
7	LED control card • 2055-CTO, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 64x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Qx, 8Rx, 8Sx, 8Tx, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Vx, 9Wx, 9Zx, A2x, A7x, AMx, APx, ARx, ASx, AWx, AXx • 2056-CTO, 5Tx • 2081-CTO • 2082-CTO, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 6Mx, 6Nx, 6Px, 6Qx, 6Zx, 72x, 73x, 7Zx, 82x, 85x, 9Px, AAx, ABx, ACx, ADx, B7x, B8x, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 5Rx, 5Yx, 6Jx, 6Kx, 6Lx, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 87x, 88x, 89x, 8Ax, 8Bx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, E3x, E4x • 2241-CTO, 4Xx, 5Ux, 5Zx, E4x, E5x • 2242-CTO, 4Gx, 4Hx, 4Jx, 4Kx, 5Gx, 5Hx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Qx, 8Sx, BVx, BWx • 2243-CTO, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Px, 7Rx, 7Sx, 7Wx, 8Zx, 92x, 93x, 94x, 95x, 96x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W8080	N

Table 41. Parts list—15.4-in. WXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
7	LED control card • 2055-CTO, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 64x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Qx, 8Rx, 8Sx, 8Tx, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Vx, 9Wx, 9Zx, A2x, A7x, AMx, APx, ARx, ASx, AWx, AXx • 2056-CTO, 5Tx • 2081-CTO • 2082-CTO, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 6Mx, 6Nx, 6Px, 6Qx, 6Zx, 72x, 73x, 7Zx, 82x, 85x, 9Px, AAx, ABx, ACx, ADx, B7x, B8x, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 5Rx, 5Yx, 6Jx, 6Kx, 6Lx, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 87x, 88x, 89x, 8Ax, 8Bx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, E3x, E4x • 2241-CTO, 4Xx, 5Ux, 5Zx, E4x, E5x • 2242-CTO, 4Gx, 4Hx, 4Jx, 4Kx, 5Gx, 5Hx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Qx, 8Sx, BVx, BWx • 2243-CTO, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Px, 7Rx, 7Sx, 7Wx, 8Zx, 92x, 93x, 94x, 95x, 96x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42W8082	N

Table 41. Parts list—15.4-in. WXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
8	Bluetooth daughter card (BDC-2.1) • 2055-CTO, 2Lx, 2Nx, 48x, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 64x, 7Fx, 7Gx, 7Hx, 7Jx, 7Lx, 8Ax, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Nx, 8Qx, 8Rx, 8Sx, 8Tx, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Vx, 9Wx, 9Zx, A2x, A3x, A4x, A5x, A6x, A7x, AMx, APx, ARx, ASx, AUx, AWx, AXx • 2056-CTO, 5Tx • 2081-CTO, 9Mx • 2082-CTO, 3Mx, 3Nx, 58x, 5Cx, 5Dx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 5Xx, 5Yx, 5Zx, 6Cx, 6Dx, 6Mx, 6Nx, 6Px, 6Qx, 6Ux, 6Vx, 6Zx, 72x, 73x, 7Zx, 82x, 85x, 97x, 98x, 9Ex, 9Nx, 9Px, AAx, ABx, ACx, ADx, AEx, AFx, AGx, B7x, B8x, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Rx, 2Vx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 58x, 59x, 5Ax, 5Nx, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Qx, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 87x, 88x, 89x, 8Ax, 8Bx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Nx, E1x, E2x, E3x, E4x • 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 58x, 5Sx, 5Tx, 5Ux, 5Zx, E1x, E2x, E3x, E4x, E5x • 2242-CTO, 23x, 26x, 28x, 32x, 34x, 35x, 36x, 37x, 38x, 3Ax, 4Gx, 4Hx, 4Jx, 4Kx, 55x, 5Ex, 5Hx, 5Vx, 66x, 6Cx, 6Rx, 6Sx, 73x, 74x, 75x, 7Lx, 7Vx, 8Qx, BVx, BWx • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 57x, 5Bx, 5Cx, 5Fx, 5Jx, 5Kx, 5Lx, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Px, 7Rx, 7Sx, 7Wx, 7Xx, 7Yx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T0969	N

Table 41. Parts list—15.4-in. WXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
9	LCD panel, 15.4-in. WXGA • 2055-CTO, 2Lx, 2Nx, 48x, 7Lx, 8Ax, 8Nx, A3x, A4x, A5x, A6x, AUx • 2056-CTO • 2081-CTO, 9Mx • 2082-CTO, 3Mx, 3Nx, 58x, 5Xx, 5Yx, 5Zx, 66x, 67x, 6Cx, 6Dx, 6Ux, 6Vx, 97x, 98x, 9Ex, 9Nx, AEx, AFx, AGx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Rx, 2Vx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 58x, 59x, 5Ax, 5Nx, 5Qx, 5Wx, 5Xx, 5Zx, 6Mx, 6Nx, 6Qx, 8Nx, E1x, E2x • 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 58x, 5Sx, 5Tx, E1x, E2x, E3x • 2242-CTO, 22x, 23x, 26x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 3Ax, 4Ex, 4Fx, 55x, 5Ex, 5Fx, 5Vx, 8Px • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 7Xx, 7Yx, 8Wx, 8Xx, 8Yx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T0486	N
9	LCD panel, 15.4-in. WXGA • 2055-CTO, 2Lx, 2Nx, 48x, 7Lx, 8Ax, 8Nx, A3x, A4x, A5x, A6x, AUx • 2056-CTO • 2081-CTO, 9Mx • 2082-CTO, 3Mx, 3Nx, 58x, 5Xx, 5Yx, 5Zx, 66x, 67x, 6Cx, 6Dx, 6Ux, 6Vx, 97x, 98x, 9Ex, 9Nx, AEx, AFx, AGx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Rx, 2Vx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 58x, 59x, 5Ax, 5Nx, 5Qx, 5Wx, 5Xx, 5Zx, 6Mx, 6Nx, 6Qx, 8Nx, E1x, E2x • 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 58x, 5Sx, 5Tx, E1x, E2x, E3x • 2242-CTO, 22x, 23x, 26x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 3Ax, 4Ex, 4Fx, 55x, 5Ex, 5Fx, 5Vx, 8Px • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 7Xx, 7Yx, 8Wx, 8Xx, 8Yx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T0607	N

Table 41. Parts list—15.4-in. WXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
9	LCD panel, 15.4-in. WXGA • 2055-CTO, 2Lx, 2Nx, 48x, 7Lx, 8Ax, 8Nx, A3x, A4x, A5x, A6x, AUx • 2056-CTO • 2081-CTO, 9Mx • 2082-CTO, 3Mx, 3Nx, 58x, 5Xx, 5Yx, 5Zx, 66x, 67x, 6Cx, 6Dx, 6Ux, 6Vx, 97x, 98x, 9Ex, 9Nx, AEx, AFx, AGx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 2Hx, 2Jx, 2Kx, 2Lx, 2Mx, 2Rx, 2Vx, 2Yx, 3Hx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 3Ux, 3Vx, 58x, 59x, 5Ax, 5Nx, 5Qx, 5Wx, 5Xx, 5Zx, 6Mx, 6Nx, 6Qx, 8Nx, E1x, E2x • 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 58x, 5Sx, 5Tx, E1x, E2x, E3x • 2242-CTO, 22x, 23x, 26x, 28x, 32x, 33x, 34x, 35x, 36x, 37x, 38x, 3Ax, 4Ex, 4Fx, 55x, 5Ex, 5Fx, 5Vx, 8Px • 2243-CTO, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Lx, 4Mx, 4Nx, 57x, 5Bx, 5Cx, 5Dx, 5Fx, 5Jx, 5Kx, 5Lx, 7Xx, 7Yx, 8Wx, 8Xx, 8Yx • 2246-CTO, 4Bx • 2247-CTO, 4Cx • 2261-CTO, 2Fx, 2Hx, 3Dx, 3Ex, 3Fx, 3Gx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T0576	N
9	LCD panel, 15.4-in. WXGA LED backlight • 2055-CTO, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 64x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Qx, 8Rx, 8Sx, 8Tx, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Vx, 9Wx, 9Zx, A2x, A7x, AMx, APx, ARx, ASx, AWx, AXx • 2056-CTO, 5Tx • 2081-CTO • 2082-CTO, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 6Mx, 6Nx, 6Px, 6Qx, 6Zx, 72x, 73x, 7Zx, 82x, 85x, 9Px, AAx, ABx, ACx, ADx, B7x, B8x, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 5Rx, 5Yx, 6Jx, 6Kx, 6Lx, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 87x, 88x, 89x, 8Ax, 8Bx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, E3x, E4x • 2241-CTO, 4Xx, 5Ux, 5Zx, E4x, E5x • 2242-CTO, 4Gx, 4Hx, 4Jx, 4Kx, 5Gx, 5Hx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Qx, 8Sx, BVx, BWx • 2243-CTO, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Px, 7Rx, 7Sx, 7Wx, 8Zx, 92x, 93x, 94x, 95x, 96x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T0589	N

Table 41. Parts list—15.4-in. WXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
9	LCD panel, 15.4-in. WXGA LED backlight • 2055-CTO, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 64x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Qx, 8Rx, 8Sx, 8Tx, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Vx, 9Wx, 9Zx, A2x, A7x, AMx, APx, ARx, ASx, AWx, AXx • 2056-CTO, 5Tx • 2081-CTO • 2082-CTO, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 6Mx, 6Nx, 6Px, 6Qx, 6Zx, 72x, 73x, 7Zx, 82x, 85x, 9Px, AAx, ABx, ACx, ADx, B7x, B8x, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 5Rx, 5Yx, 6Jx, 6Kx, 6Lx, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 87x, 88x, 89x, 8Ax, 8Bx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, E3x, E4x • 2241-CTO, 4Xx, 5Ux, 5Zx, E4x, E5x • 2242-CTO, 4Gx, 4Hx, 4Jx, 4Kx, 5Gx, 5Hx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Qx, 8Sx, BVx, BWx • 2243-CTO, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Px, 7Rx, 7Sx, 7Wx, 8Zx, 92x, 93x, 94x, 95x, 96x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T0587	N

Table 41. Parts list—15.4-in. WXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
9	LCD panel, 15.4-in. WXGA LED backlight • 2055-CTO, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 64x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Qx, 8Rx, 8Sx, 8Tx, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Vx, 9Wx, 9Zx, A2x, A7x, AMx, APx, ARx, ASx, AWx, AXx • 2056-CTO, 5Tx • 2081-CTO • 2082-CTO, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 6Mx, 6Nx, 6Px, 6Qx, 6Zx, 72x, 73x, 7Zx, 82x, 85x, 9Px, AAx, ABx, ACx, ADx, B7x, B8x, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 5Rx, 5Yx, 6Jx, 6Kx, 6Lx, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 87x, 88x, 89x, 8Ax, 8Bx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, E3x, E4x • 2241-CTO, 4Xx, 5Ux, 5Zx, E4x, E5x • 2242-CTO, 4Gx, 4Hx, 4Jx, 4Kx, 5Gx, 5Hx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Qx, 8Sx, BVx, BWx • 2243-CTO, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Px, 7Rx, 7Sx, 7Wx, 8Zx, 92x, 93x, 94x, 95x, 96x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T0797	N

Table 41. Parts list—15.4-in. WXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
9	LCD panel, 15.4-in. WXGA LED backlight • 2055-CTO, 5Rx, 5Sx, 5Tx, 5Ux, 5Vx, 5Wx, 62x, 64x, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 8Cx, 8Dx, 8Fx, 8Gx, 8Hx, 8Qx, 8Rx, 8Sx, 8Tx, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Vx, 9Wx, 9Zx, A2x, A7x, AMx, APx, ARx, ASx, AWx, AXx • 2056-CTO, 5Tx • 2081-CTO • 2082-CTO, 5Cx, 5Dx, 5Ex, 5Fx, 5Gx, 5Jx, 5Kx, 5Mx, 5Nx, 5Px, 5Qx, 5Rx, 6Mx, 6Nx, 6Px, 6Qx, 6Zx, 72x, 73x, 7Zx, 82x, 85x, 9Px, AAx, ABx, ACx, ADx, B7x, B8x, BCx, BDx, BEx, BFx, BGx, BHx, BJx • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 54x, 5Rx, 5Yx, 6Jx, 6Kx, 6Lx, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 87x, 88x, 89x, 8Ax, 8Bx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, E3x, E4x • 2241-CTO, 4Xx, 5Ux, 5Zx, E4x, E5x • 2242-CTO, 4Gx, 4Hx, 4Jx, 4Kx, 5Gx, 5Hx, 66x, 6Bx, 6Cx, 6Rx, 6Sx, 6Yx, 6Zx, 72x, 73x, 74x, 75x, 7Lx, 7Ux, 7Vx, 8Qx, 8Sx, BVx, BWx • 2243-CTO, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 4Ux, 56x, 5Mx, 62x, 63x, 64x, 65x, 67x, 68x, 69x, 6Ax, 6Dx, 6Ex, 6Fx, 6Tx, 6Ux, 6Vx, 6Wx, 6Xx, 76x, 77x, 78x, 7Ax, 7Bx, 7Cx, 7Dx, 7Px, 7Rx, 7Sx, 7Wx, 8Zx, 92x, 93x, 94x, 95x, 96x, 98x, 99x, 9Ax, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx, BXx, BYx • 2246-CTO • 2247-CTO • 2261-CTO, 4Vx • 4058-CTO • 4061-CTO • 4062-CTO • 4063-CTO • 4064-CTO • 4065-CTO	42T0795	N
10	Clear plate kit	43Y9739	N

Table 42. Parts list—15.4-in. WSXGA+ TFT

No.	FRU	FRU no.	CRU ID
1	LCD cover kit	43Y9735	N

Table 42. Parts list—15.4-in. WSXGA+ TFT (continued)

No.	FRU	FRU no.	CRU ID
2	Integrated camera • 2055-CTO, 2Dx, 2Vx, 2Xx, 3Ax, 46x, 47x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 78x, 8Jx, 8Kx, 8Lx, 8Mx, 8Px, 9Sx, A8x, A9x, AKx, ALx, ANx, AQx, ATx, AVx, B4x, E1x, E2x • 2056-CTO, 4Kx, 4Sx, 4Tx, 7Cx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 52x, 53x, 7Wx • 2082-CTO, 27x, 28x, 3Fx, 3Gx, 3Jx, 3Kx, 3Lx, 56x, 57x, 59x, 6Ax, 6Bx, 6Gx, 6Hx, 6Jx, 6Kx, 6Rx, 6Sx, 6Tx, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Xx, 83x, 84x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 93x, 94x, 95x, 96x, 9Fx, 9Gx, 9Hx, 9Jx, 9Qx, B9x, BAx, BBx, BKx, BMx, BNx, BPx, BQx, BRx, BSx • 2083-CTO • 2087-CTO • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Wx • 2241-CTO • 2242-CTO, 24x, 25x, 8Rx • 2243-CTO, 2Bx, 7Mx, 7Nx, 97x • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 7Zx • 4058-CTO • 4061-CTO, 2Mx, 2Nx, 2Px, 2Qx, 3Ux, 3Yx, 42x, 43x, 49x, 4Ax, 4Ux, 64x, 6Ax • 4062-CTO, 3Ax, 3Rx, 4Fx, 4Kx, 55x, 56x, 5Dx, 5Hx, 5Jx, 5Sx, 5Tx • 4063-CTO, 2Tx • 4064-CTO • 4065-CTO	42T3634	N
3	Wireless LAN/WAN/wireless USB antenna assembly	44C5386	N
3	Wireless LAN/WAN/wireless USB antenna assembly	44C5387	N
4	LCD magnesium structure frame assembly	43Y9736	N
5	LCD cable assembly	44C5385	N
6	Hinge assembly	43Y9737	N
6	Hinge assembly	43Y9738	N
7	Inverter card	41W1338	N
7	Inverter card	13R1015	N

Table 42. Parts list—15.4-in. WSXGA+ TFT (continued)

No.	FRU	FRU no.	CRU ID
8	Bluetooth daughter card (BDC-2.1) • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Ex, 2Mx, 2Px, 2Xx, 3Ax, 45x, 46x, 47x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 63x, 65x, 74x, 75x, 76x, 77x, 78x, 7Kx, 89x, 8Bx, 8Ex, 8Jx, 8Kx, 8Lx, 8Mx, 8Px, 8Ux, 9Ax, 9Sx, 9Tx, 9Ux, 9Xx, 9Yx, A8x, A9x, AHx, AJx, AKx, ALx, ANx, AQx, ATx, AVx, AYx, AZx, B2x, B3x, B4x, E1x, E2x • 2056-CTO, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 63x, 79x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 3Ex, 52x, 53x, 7Wx • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 59x, 5Ax, 5Bx, 69x, 6Bx, 6Fx, 6Hx, 6Jx, 6Kx, 6Lx, 6Rx, 6Sx, 6Tx, 6Wx, 6Xx, 6Yx, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 83x, 84x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 99x, 9Fx, 9Gx, 9Hx, 9Jx, 9Qx, B5x, B6x, B9x, BAx, BBx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Qx, 2Sx, 2Ux, 2Wx, 2Xx, 4Dx, 5Px, 6Gx, 6Hx, 6Px, 79x, 7Ex, 85x, 86x, 8Cx, 8Jx, 8Kx, 8Lx, 8Mx • 2241-CTO • 2242-CTO, 24x, 25x, 27x, 39x, 8Rx • 2243-CTO, 2Bx, 7Mx, 7Nx, 8Tx, 8Ux, 8Vx, 97x • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 2Ex, 2Gx, 7Zx • 4058-CTO • 4061-CTO, 2Hx, 2Mx, 2Nx, 2Px, 2Qx, 2Zx, 3Ux, 3Xx, 3Yx, 3Zx, 42x, 43x, 49x, 4Ax, 4Ux, 64x, 6Ax, 6Cx, 6Dx • 4062-CTO, 29x, 3Ax, 3Mx, 3Rx, 4Fx, 4Kx, 54x, 55x, 56x, 5Dx, 5Hx, 5Jx, 5Qx, 5Rx, 5Sx, 5Tx • 4063-CTO, 2Tx, 33x • 4064-CTO • 4065-CTO	42T0969	N

Table 42. Parts list—15.4-in. WSXGA+ TFT (continued)

No.	FRU	FRU no.	CRU ID
9	LCD panel, 15.4-in. WSXGA+ • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Ex, 2Mx, 2Px, 2Vx, 2Xx, 3Ax, 45x, 46x, 47x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 63x, 65x, 74x, 75x, 76x, 77x, 78x, 7Kx, 89x, 8Bx, 8Ex, 8Jx, 8Kx, 8Lx, 8Mx, 8Px, 8Ux, 9Ax, 9Sx, 9Tx, 9Ux, 9Xx, 9Yx, A8x, A9x, AHx, AJx, AKx, ALx, ANx, AQx, ATx, AVx, AYx, AZx, B2x, B3x, B4x, E1x, E2x, E3x • 2056-CTO, 34x, 4Kx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 63x, 79x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 3Ex, 52x, 53x, 7Wx • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 59x, 5Ax, 5Bx, 68x, 69x, 6Ax, 6Bx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Rx, 6Sx, 6Tx, 6Wx, 6Xx, 6Yx, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 83x, 84x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 99x, 9Fx, 9Gx, 9Hx, 9Jx, 9Qx, B5x, B6x, B9x, BAx, BBx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Qx, 2Sx, 2Ux, 2Wx, 2Xx, 4Dx, 5Px, 6Gx, 6Hx, 6Px, 79x, 7Ex, 85x, 86x, 8Cx, 8Jx, 8Kx, 8Lx, 8Mx, E5x • 2241-CTO, 3Wx • 2242-CTO, 24x, 25x, 27x, 39x, 8Rx • 2243-CTO, 2Bx, 7Mx, 7Nx, 8Tx, 8Ux, 8Vx, 97x • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 2Ex, 2Gx, 7Zx • 4058-CTO • 4061-CTO, 2Hx, 2Mx, 2Nx, 2Px, 2Qx, 2Zx, 3Ux, 3Xx, 3Yx, 3Zx, 42x, 43x, 49x, 4Ax, 4Ux, 64x, 6Ax, 6Cx, 6Dx • 4062-CTO, 29x, 3Ax, 3Mx, 3Rx, 4Fx, 4Kx, 54x, 55x, 56x, 5Dx, 5Hx, 5Jx, 5Qx, 5Rx, 5Sx, 5Tx • 4063-CTO, 2Tx, 33x • 4064-CTO • 4065-CTO	42T0488	N

Table 42. Parts list—15.4-in. WSXGA+ TFT (continued)

No.	FRU	FRU no.	CRU ID
9	LCD panel, 15.4-in. WSXGA+ • 2055-CTO, 2Bx, 2Cx, 2Dx, 2Ex, 2Mx, 2Px, 2Vx, 2Xx, 3Ax, 45x, 46x, 47x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 63x, 65x, 74x, 75x, 76x, 77x, 78x, 7Kx, 89x, 8Bx, 8Ex, 8Jx, 8Kx, 8Lx, 8Mx, 8Px, 8Ux, 9Ax, 9Sx, 9Tx, 9Ux, 9Xx, 9Yx, A8x, A9x, AHx, AJx, AKx, ALx, ANx, AQx, ATx, AVx, AYx, AZx, B2x, B3x, B4x, E1x, E2x, E3x • 2056-CTO, 34x, 4Kx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 63x, 79x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x • 2081-CTO, 22x, 24x, 3Ex, 52x, 53x, 7Wx • 2082-CTO, 26x, 27x, 28x, 3Fx, 3Gx, 3Hx, 3Jx, 3Kx, 3Lx, 3Rx, 52x, 53x, 54x, 55x, 56x, 57x, 59x, 5Ax, 5Bx, 68x, 69x, 6Ax, 6Bx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Rx, 6Sx, 6Tx, 6Wx, 6Xx, 6Yx, 7Dx, 7Mx, 7Nx, 7Px, 7Qx, 7Rx, 7Sx, 7Tx, 7Ux, 7Vx, 7Xx, 7Yx, 83x, 84x, 86x, 87x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, 96x, 99x, 9Fx, 9Gx, 9Hx, 9Jx, 9Qx, B5x, B6x, B9x, BAx, BBx, BKx, BMx, BNx, BPx, BQx, BRx, BSx, BTx, BUx • 2083-CTO, 4Yx • 2087-CTO, 4Zx • 2088-CTO, 3Tx, 3Wx, 3Yx, 3Zx, 42x, 43x, 44x, 88x • 2089-CTO, 2Qx, 2Sx, 2Ux, 2Wx, 2Xx, 4Dx, 5Px, 6Gx, 6Hx, 6Px, 79x, 7Ex, 85x, 86x, 8Cx, 8Jx, 8Kx, 8Lx, 8Mx, E5x • 2241-CTO, 3Wx • 2242-CTO, 24x, 25x, 27x, 39x, 8Rx • 2243-CTO, 2Bx, 7Mx, 7Nx, 8Tx, 8Ux, 8Vx, 97x • 2246-CTO • 2247-CTO • 2261-CTO, 2Dx, 2Ex, 2Gx, 7Zx • 4058-CTO • 4061-CTO, 2Hx, 2Mx, 2Nx, 2Px, 2Qx, 2Zx, 3Ux, 3Xx, 3Yx, 3Zx, 42x, 43x, 49x, 4Ax, 4Ux, 64x, 6Ax, 6Cx, 6Dx • 4062-CTO, 29x, 3Ax, 3Mx, 3Rx, 4Fx, 4Kx, 54x, 55x, 56x, 5Dx, 5Hx, 5Jx, 5Qx, 5Rx, 5Sx, 5Tx • 4063-CTO, 2Tx, 33x • 4064-CTO • 4065-CTO	42T0423	N
10	Clear plate kit	43Y9739	N

Table 43. Parts list—15.4-in. WUXGA TFT

No.	FRU	FRU no.	CRU ID
1	LCD cover kit	43Y9735	N

Table 43. Parts list—15.4-in. WUXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
2	Integrated camera • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO • 4061-CTO, 2Kx, 2Lx, 2Rx, 2Sx, 32x, 38x, 3Ex, 3Vx, 3Wx, 46x, 47x, 48x, 4Bx, 4Px, 4Qx, 4Rx, 4Vx, 4Wx, 4Zx, 52x, 53x, 65x, 66x, 67x, 68x, 69x, 6Bx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 2Gx, 2Xx, 2Yx, 36x, 37x, 3Bx, 3Hx, 3Nx, 3Px, 3Qx, 3Sx, 4Dx, 4Ex, 4Gx, 4Hx, 4Jx, 4Lx, 4Tx, 58x, 59x, 5Ex, 5Fx, 5Gx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Ux, 34x, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T3634	N
3	Wireless LAN/WAN/wireless USB antenna assembly	44C5386	N
3	Wireless LAN/WAN/wireless USB antenna assembly	44C5387	N
4	LCD magnesium structure frame assembly	43Y9736	N
5	LCD cable assembly	44C5385	N
6	Hinge assembly	43Y9737	N
6	Hinge assembly	43Y9738	N
7	Inverter card	41W1338	N
7	Inverter card	13R1015	N

Table 43. Parts list—15.4-in. WUXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
8	Bluetooth daughter card (BDC-2.1) • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Jx, 2Kx, 2Lx, 2Rx, 2Sx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Vx, 3Wx, 44x, 45x, 46x, 47x, 48x, 4Bx, 4Px, 4Qx, 4Rx, 4Vx, 4Wx, 4Zx, 52x, 53x, 65x, 66x, 67x, 68x, 69x, 6Bx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Xx, 2Yx, 35x, 36x, 37x, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Nx, 3Px, 3Qx, 3Sx, 4Dx, 4Ex, 4Gx, 4Hx, 4Jx, 4Lx, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 57x, 58x, 59x, 5Cx, 5Ex, 5Fx, 5Gx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Ux, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T0969	N
9	LCD panel, 15.4-in. WUXGA • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Jx, 2Kx, 2Lx, 2Rx, 2Sx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Vx, 3Wx, 44x, 45x, 46x, 47x, 48x, 4Bx, 4Px, 4Qx, 4Rx, 4Vx, 4Wx, 4Zx, 52x, 53x, 65x, 66x, 67x, 68x, 69x, 6Bx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Xx, 2Yx, 35x, 36x, 37x, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Nx, 3Px, 3Qx, 3Sx, 4Dx, 4Ex, 4Gx, 4Hx, 4Jx, 4Lx, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 57x, 58x, 59x, 5Cx, 5Ex, 5Fx, 5Gx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Ux, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	44C9614	N

Table 43. Parts list—15.4-in. WUXGA TFT (continued)

No.	FRU	FRU no.	CRU ID
9	LCD panel, 15.4-in. WUXGA • 2056-CTO • 2081-CTO • 2082-CTO • 2083-CTO • 2087-CTO • 2088-CTO • 2089-CTO • 2241-CTO • 2242-CTO • 2243-CTO • 2246-CTO • 2247-CTO • 2261-CTO • 4058-CTO, 22x, 23x, 3Lx, 4Sx • 4061-CTO, 2Jx, 2Kx, 2Lx, 2Rx, 2Sx, 32x, 38x, 39x, 3Dx, 3Ex, 3Fx, 3Tx, 3Vx, 3Wx, 44x, 45x, 46x, 47x, 48x, 4Bx, 4Px, 4Qx, 4Rx, 4Vx, 4Wx, 4Zx, 52x, 53x, 65x, 66x, 67x, 68x, 69x, 6Bx, 6Ex, 6Fx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx • 4062-CTO, 24x, 25x, 26x, 27x, 28x, 2Ax, 2Bx, 2Cx, 2Dx, 2Ex, 2Fx, 2Gx, 2Xx, 2Yx, 35x, 36x, 37x, 3Bx, 3Cx, 3Gx, 3Hx, 3Jx, 3Kx, 3Nx, 3Px, 3Qx, 3Sx, 4Dx, 4Ex, 4Gx, 4Hx, 4Jx, 4Lx, 4Mx, 4Nx, 4Tx, 4Xx, 4Yx, 57x, 58x, 59x, 5Cx, 5Ex, 5Fx, 5Gx, 5Kx, 5Lx, 5Mx, 5Nx, 5Px, 5Ux, 5Vx, 5Wx, 5Xx, 5Yx, 5Zx, 62x, 63x • 4063-CTO, 2Ux, 34x, 3Fx, 4Cx • 4064-CTO, 2Vx • 4065-CTO, 2Wx	42T0613	N
10	Clear plate kit	43Y9739	N

Keyboard

Table 44. Parts list—Keyboard

Language	P/N			CRU ID
Arabic	42T4005	42T4069	42T3940	**
Belgian	42T4006	42T4070	42T3941	
Brazilian Portuguese	42T4033	42T4097	42T3968	
Bulgarian	42T4145	42T4142	42T4138	
Canadian French (058)	42T4004	42T4068	42T3939	
Canadian French (Acnor)	42T4003	42T4067	42T3938	
Czech	42T4007	42T4071	42T3942	
Danish	42T4008	42T4072	42T3943	
Dutch	42T4016	42T4080	42T3951	
Finnish, Swedish	42T4023	42T4087	42T3958	
French	42T4010	42T4074	42T3945	
German	42T4011	42T4075	42T3946	
Greek (U.S. English and Greek layout)	42T4012	42T4076	42T3947	
Hebrew	42T4014	42T4078	42T3949	
Hungarian	42T4013	42T4077	42T3948	
Icelandic	—	—	42T3969	
Italian	42T4015	42T4079	42T3950	
Japanese	42T4028	42T4092	42T3963	
Korean	42T4032	42T4096	42T3967	
Latin American Spanish	42T4031	42T4095	42T3966	
Norwegian	42T4017	42T4081	42T3952	
Polish	42T4018	42T4082	42T3953	
Portuguese	42T4019	42T4083	42T3954	
Russian	42T4020	42T4084	42T3955	
Slovak	42T4021	42T4085	42T3956	
Slovenian	42T4022	42T4086	42T3957	
Spanish	42T4009	42T4073	42T3944	
Swiss	42T4024	42T4088	42T3959	
Thai	42T4030	42T4094	42T3965	
Traditional Chinese	42T4029	42T4093	42T3964	
Turkish	42T4025	42T4089	42T3960	
U.K. English	42T4026	42T4090	42T3961	
U.S. English	42T4002	42T4066	42T3937	
U.S. English (International, with a Euro symbol)	42T4027	42T4091	42T3962	

Table 45. Parts list—Keyboard

Language	P/N			CRU ID
Arabic	42T3212	42T3276	42T3146	**
Belgian	42T3213	42T3277	42T3147	
Brazilian Portuguese	42T3240	42T3304	42T3174	
Canadian French (058)	42T3211	42T3275	42T3145	
Canadian French (Acnor)	42T3210	42T3274	42T3144	
Czech	42T3214	42T3278	42T3148	
Danish	42T3215	42T3279	42T3149	
Dutch	42T3223	42T3287	42T3157	
Finnish, Swedish	42T3230	42T3294	42T3164	
French	42T3217	42T3281	42T3151	
German	42T3218	42T3282	42T3152	
Greek (U.S. English and Greek layout)	42T3219	42T3283	42T3153	
Hebrew	42T3221	42T3285	42T3155	
Hungarian	42T3220	42T3284	42T3154	
Icelandic	—	—	42T3175	
Italian	42T3222	42T3286	42T3156	
Japanese	42T3235	42T3299	42T3169	
Korean	42T3239	42T3303	42T3173	
Latin American Spanish	42T3238	42T3302	42T3172	
Norwegian	42T3224	42T3288	42T3158	
Polish	42T3225	42T3289	42T3159	
Portuguese	42T3226	42T3290	42T3160	
Russian	42T3227	42T3291	42T3161	
Slovak	42T3228	42T3292	42T3162	
Slovenian	42T3229	42T3293	42T3163	
Spanish	42T3216	42T3280	42T3150	
Swiss	42T3231	42T3295	42T3165	
Thai	42T3237	42T3301	42T3171	
Traditional Chinese	42T3236	42T3300	42T3170	
Turkish	42T3232	42T3296	42T3166	
U.K. English	42T3233	42T3297	42T3167	
U.S. English	42T3209	42T3273	42T3143	
U.S. English (International, with a Euro symbol)	42T3234	42T3298	42T3168	

Miscellaneous parts

Table 46. Parts list—Miscellaneous parts

FRU	P/N	CRU ID
Screw kit (including nylon-coated screws): • M2 × 5 mm (black), flat head (11) • M2 × 2.7 mm (black), flat head (10) • M2 × 3.5 mm (black), bind head (18) • M2 × 14 mm (black), flat head (10) • M2 × 14 mm with TB2440B (2) • M2 × 2.8 mm (silver), flat head (5) • M2 × 14 mm HDD security (2) • Security screw (2) • M2.5 × 4 mm (black), flat head (2) • M2.5 × 6.5 mm (black), flat head (13) • M2 × 3 mm, tamper proof (2) • M2 × 3 mm (silver), small head (21) • M2 × 9.5 mm (black), bind head (6) • Hex stud (2) • Screw cap, round, dia. 7 mm (4) • Screw cap, square (2)	45N5866	N
Tape kit • Antenna cable fix (80 mm×25 mm) • Cable fix • Cable, circle • Cable fix (10 mm×20 mm) • LCD FPC	43Y9734	N
Base miscellaneous parts: • Knob, wireless switch • Lever, wireless switch • Slide lever, eject • Spring, slide lever/battery eject • Bracket puller, eject • Pull lever, eject • Spring, eject • Rubber foot (front) • Rubber foot (rear L) • Shield plate 1 (GND docking) • Insulation sheet 1 • Lens, LED-bay switch • Latch, battery eject • Screw cap (dia. 7 mm) • Form-battery • Lens, LED-SD Card • Lens, LED-RJ45 • Bracket-RJ45 • Form, under planar-1 • Form, under planar-2 • Spreader, heatsink base cover • Foil, heatsink-1 • Foil, heatsink-2 • Spacer, ODD • Insulation sheet ODD • Insulation sheet, RJ45 Bracket • Insulation sheet, RJ11 Sub card • Bracket ESD for Docking • Dust Filter _1 • Dust Filter _5	43Y9731	N

Table 46. Parts list—Miscellaneous parts (continued)

FRU	P/N	CRU ID
System miscellaneous parts: • *(a)*Cable assembly, DC in. • *(b)* Bracket, N/B, fan discrete/integ. • *(c)* Bracket, VGA, fan discrete/integ. • *(d)*Cable assembly, AMOM (modem) • *(f)* Bracket, CPU support assembly • Bracket, Kensington • Guide, SIM • Bracket, IEEE 1394 • EMI shield bracket for MDC • Bracket, Keyboarad support assembly, Integrate • Bracket, Keyboarad support assembly, Discrete **Note:** Italicized letters in parentheses are references to the exploded view in "Overall" on page 144.	45N5500	N
System board miscellaneous parts: • Insulation sheet, docking • Insulation under 4-in-1 • Insulation sheet, front louver formed • Insulation sheet, PC Card slot • Insulation sheet, bottom CPU • Insulation sheet, front top • Shield sheet for NB • Insulation sheet for video • Insulation sheet, bottom louver • Shield sheet, AMOM	43Y9730	N

AC adapters

Table 47. Parts list—2-pin AC adapters

FRU	P/N	CRU ID
2-pin (65 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxY, xxU)	42T5282	*
2-pin (65 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxY, xxU)	42T4419	
2-pin (65 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxY, xxU)	42T4423	
2-pin (90 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxY, xxU)	92P1114	
2-pin (90 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxY, xxU)	42T4427	
2-pin (90 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxY, xxU)	42T4431	
2-pin (90 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxY, xxU)	42T4435	
2-pin (90 W, 20 V) adapter (models CTO, xxE, xxF, xxJ, xxL, xxP, xxS, xxY, xxU)	42T4439	

Table 48. Parts list—3-pin AC adapters

FRU	P/N	CRU ID
3-pin (65W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxT, xxV) OP	42T5283	*
3-pin (65W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxT, xxV)	42T4421	
3-pin (65W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxT, xxV)	42T4417	
3-pin (90 W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxT, xxV)	92P1112	
3-pin (90 W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxT, xxV)	42T4425	
3-pin (90 W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxT, xxV)	42T4429	
3-pin (90 W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxT, xxV)	42T4433	
3-pin (90 W, 20 V) adapter (models CTO, xxA, xxB, xxC, xxG, xxH, xxK, xxM, xxT, xxV)	45N0068	

Power cords

A ThinkPad power cord for a specific country or region is usually available only in that country or region:

Table 49. Parts list—2-pin power cords

Region	P/N		CRU ID
Argentina • models -CTO, xxY	42T5020	42T5105	*
Brazil • models -CTO, xxP	42T5180	42T5183	
Canada, U.S. • models -CTO, xxF, xxL, xxS, xxU	42T5008	42T5093	
Japan • models -CTO, xxE, xxJ	42T5014	42T5099	

Table 50. Parts list—3-pin power cords

Region	P/N		CRU ID
Australia, New Zealand • models -CTO, xxG, xxM	42T5050	42T5135	*
Bangladesh, Sri Lanka, South Africa • models -CTO, xxG	42T5056	42T5141	
Canada, U.S. • models -CTO, xxF, xxL, xxS, xxU	42T5004	42T5089	
China (P.R.C.) (other than Hong Kong S.A.R.) • models -CTO, xxC	42T5065	42T5150	
Denmark • models -CTO, xxG	42T5041	42T5126	
European countries • models -CTO, xxG	42T5029	42T5114	
India • models -CTO, xxG	42T5083	42T5168	
Israel • models -CTO, xxG	42T5062	42T5147	
Italy • models -CTO, xxG	42T5047	42T5132	
Korea • models -CTO, xxK	42T5077	42T5162	
Switzerland • models -CTO, xxG	42T5044	42T5129	
Taiwan • models -CTO, xxV	42T5071	42T5156	
U.K., China (Hong Kong S.A.R.) • models -CTO, xxB, xxG, xxH	42T5035	42T5120	

Recovery discs

Windows XP Professional (32 bit) DVDs

Windows XP Professional (32 bit) is preinstalled as the operating system in the following models:

- 2055-CTO, 2Mx, 65x, 74x, 75x, 76x, A7x, A8x
- 2056-CTO, 79x
- 2081-CTO
- 2082-CTO, 57x, 58x, 5Px, 5Qx, 6Rx, 6Vx, 6Wx, 7Rx, 7Ux, 7Vx, 7Xx, 7Yx, 82x, 87x, 97x, 98x, 9Ex, AAx, ABx, ACx
- 2083-CTO
- 2087-CTO
- 2088-CTO
- 2089-CTO, 2Lx, 2Rx, 2Sx, 54x, 59x, 5Ax, 5Nx, 8Bx, 8Cx, 8Dx
- 2241-CTO, 58x
- 2242-CTO, 37x, 5Ex, 6Bx, 6Cx, 72x, 74x, 75x, 8Px, 8Qx
- 2243-CTO, 4Lx, 4Mx, 4Sx, 5Jx, 62x, 63x, 65x, 67x, 6Tx, 6Ux, 76x, 7Cx, 7Dx, 7Mx, 7Px, 7Rx, 7Xx, 8Tx, 8Ux, 8Wx, 8Xx, 8Zx, 93x, 98x, 9Ax
- 2246-CTO
- 2247-CTO
- 2261-CTO, 2Gx, 2Hx
- 4058-CTO
- 4061-CTO, 38x, 39x, 6Ex, 6Jx
- 4062-CTO, 27x, 2Dx, 2Yx, 36x, 3Ax, 3Bx, 4Fx, 4Gx, 4Lx, 56x, 5Dx, 5Ex, 5Hx, 5Kx, 5Mx, 5Qx, 5Sx, 5Wx, 5Xx
- 4063-CTO
- 4064-CTO
- 4065-CTO

Table 51. Parts list—Windows XP Professional (32 bit) recovery DVDs

Language	**P/N**	**CRU ID**
Arabic	58Y1832	*
Brazilian Portuguese	58Y1833	
Czech	58Y1836	
Danish	58Y1837	
Dutch	58Y1848	
English	58Y1858	
English (modem-disabled)	58Y1857	
Finnish	58Y1838	
French	58Y1839	
German	58Y1841	
Greek	58Y1840	
Hebrew	58Y1842	
Hungarian	58Y1844	
Italian	58Y1845	
Japanese	58Y2622	
Korean	58Y1847	
Norwegian	58Y1849	
Polish	58Y1850	
Russian	58Y1852	
Russian (English-enabled)	58Y1851	
Simplified Chinese	58Y1834	
Slovenian	58Y1853	
Spanish	58Y1854	
Swedish	58Y1855	
Traditional Chinese	58Y1835	
Traditional Chinese (Hong Kong S.A.R.)	58Y1843	
Turkish	58Y1856	

Windows Vista Home Basic (32 bit) DVDs

Windows Vista Home Basic (32 bit) is preinstalled as the operating system in the following models:

- 2055-CTO
- 2056-CTO
- 2081-CTO
- 2082-CTO
- 2083-CTO
- 2087-CTO
- 2088-CTO
- 2089-CTO
- 2241-CTO
- 2242-CTO, 28x
- 2243-CTO
- 2246-CTO
- 2247-CTO
- 2261-CTO, 3Fx
- 4058-CTO
- 4061-CTO
- 4062-CTO
- 4063-CTO
- 4064-CTO
- 4065-CTO

Table 52. Parts list—Windows Vista Home Basic (32 bit) recovery DVDs

Language	**P/N**	**CRU ID**
Czech	58Y2022	*
Danish	58Y2023	
English	58Y2042	
English (modem-disabled)	58Y2041	
English (for India)	58Y2095	
English, Finnish, and Swedish (in Sweden)	58Y2044	
English, French, German, and Dutch (in Belgium and Luxemburg)	58Y2043	
English, French, German, and Italian (in Switzerland)	58Y2045	
French	58Y2024	
German	58Y2026	
Greek	58Y2025	
Hebrew	58Y2027	
Hungarian	58Y2029	
Italian	58Y2030	
Japanese	58Y2627	
Korean	58Y2032	
Norwegian	58Y2033	
Polish	58Y2034	
Romanian	58Y2035	
Serbian-Latin	58Y2039	
Simplified Chinese	58Y2020	
Slovak	58Y2036	
Slovenian	58Y2037	
Spanish	58Y2038	
Traditional Chinese	58Y2021	
Traditional Chinese (Hong Kong S.A.R.)	58Y2028	
Turkish	58Y2040	

Windows Vista Home Premium (32 bit) DVDs

Windows Vista Home Premium (32 bit) is preinstalled as the operating system in the following models:

- 2055-CTO
- 2056-CTO
- 2081-CTO, 7Tx
- 2082-CTO, 86x, B5x
- 2083-CTO
- 2087-CTO
- 2088-CTO
- 2089-CTO
- 2241-CTO
- 2242-CTO, 24x, 36x, 38x, 39x, 4Jx
- 2243-CTO
- 2246-CTO
- 2247-CTO
- 2261-CTO, 2Dx, 2Fx
- 4058-CTO
- 4061-CTO
- 4062-CTO
- 4063-CTO
- 4064-CTO
- 4065-CTO

Table 53. Parts list—Windows Vista Home Premium (32 bit) recovery DVDs

Language	P/N	CRU ID
Danish	58Y2005	*
English	58Y2016	
English (modem-disabled)	58Y2015	
English (for India)	58Y2094	
English, Finnish, and Swedish (in Sweden)	58Y2018	
English, French, German, and Dutch (in Belgium and Luxemburg)	58Y2017	
English, French, German, and Italian (in Switzerland)	58Y2019	
French	58Y2006	
German	58Y2007	
Hebrew	58Y2008	
Italian	58Y2010	
Japanese	58Y2626	
Korean	58Y2012	
Norwegian	58Y2013	
Polish	58Y2085	
Simplified Chinese	58Y2003	
Spanish	58Y2014	
Traditional Chinese	58Y2004	
Traditional Chinese (Hong Kong S.A.R.)	58Y2009	
Turkish	58Y2086	

Windows Vista Business (32 bit) DVDs

Windows Vista Business (32 bit) is preinstalled as the operating system in the following models:

- 2055-CTO, 2Bx, 2Cx, 2Ex, 2Lx, 2Px, 3Ax, 45x, 46x, 47x, 48x, 49x, 4Ax, 4Bx, 4Cx, 4Dx, 4Ex, 4Fx, 4Gx, 4Hx, 5Rx, 5Vx, 5Wx, 62x, 63x, 64x, 77x, 78x, 7Gx, 7Hx, 7Jx, 7Kx, 7Lx, 89x, 8Ax, 8Bx, 8Cx, 8Dx, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx, 8Nx, 8Px, 8Qx, 8Tx, 8Ux, 9Ax, 9Bx, 9Cx, 9Dx, 9Kx, 9Lx, 9Rx, 9Sx, 9Tx, 9Ux, 9Vx, 9Wx, 9Xx, 9Yx, 9Zx, A2x, A3x, A4x, A5x, AUx, AVx, AWx, AXx, AYx, AZx, B2x, B3x, B4x, E1x, E2x, E3x
- 2056-CTO, 34x, 4Kx, 4Px, 4Qx, 4Rx, 4Sx, 4Tx, 5Tx, 63x, 7Ax, 7Bx, 7Cx, 7Lx, E1x, E2x, E3x
- 2081-CTO, 52x, 7Wx, 9Mx
- 2082-CTO, 3Fx, 3Jx, 3Kx, 3Lx, 3Mx, 3Nx, 52x, 53x, 54x, 55x, 56x, 59x, 5Ax, 5Bx, 5Zx, 6Mx, 6Nx, 6Px, 6Qx, 6Sx, 6Tx, 6Ux, 6Xx, 6Yx, 6Zx, 72x, 7Mx, 7Nx, 7Px, 7Qx, 7Sx, 7Tx, 7Zx, 83x, 84x, 85x, 8Vx, 8Wx, 8Xx, 8Yx, 8Zx, 92x, 93x, 94x, 95x, B6x, B7x, B8x, B9x, BAx, BBx, BCx, BDx, BEx, BFx, BGx, BHx, BJx, BKx, BRx, BSx, BTx, BUx
- 2083-CTO, 4Yx
- 2087-CTO, 4Zx
- 2088-CTO, 3Yx, 88x
- 2089-CTO, 2Hx, 2Jx, 2Kx, 2Mx, 2Qx, 2Vx, 2Wx, 2Xx, 2Yx, 3Hx, 3Jx, 3Kx, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 3Tx, 4Wx, 4Xx, 4Yx, 4Zx, 52x, 53x, 58x, 5Px, 5Qx, 5Rx, 5Wx, 5Xx, 5Yx, 5Zx, 6Gx, 6Hx, 6Jx, 6Kx, 6Lx, 6Mx, 6Nx, 6Px, 6Qx, 7Ex, 7Fx, 7Gx, 7Hx, 7Jx, 7Kx, 7Qx, 82x, 83x, 84x, 85x, 86x, 87x, 88x, 89x, 8Ax, 8Nx, E1x, E2x, E3x, E4x, E5x
- 2241-CTO, 3Wx, 3Xx, 3Yx, 3Zx, 42x, 43x, 44x, 4Xx, 5Sx, 5Tx, 5Ux, 5Zx, E1x, E2x, E3x, E4x, E5x
- 2242-CTO, 25x, 27x, 3Ax, 4Kx, 66x, 8Sx, BVx, BWx
- 2243-CTO, 2Bx, 2Cx, 3Bx, 3Cx, 4Dx, 4Ex, 4Qx, 4Rx, 57x, 5Fx, 5Kx, 5Lx, 64x, 68x, 69x, 6Ax, 6Fx, 6Vx, 6Wx, 77x, 78x, 7Bx, 7Nx, 7Wx, BXx, BYx
- 2246-CTO, 4Bx
- 2247-CTO, 4Cx
- 2261-CTO, 2Ex, 3Dx, 3Ex, 3Gx, 4Vx, 7Zx
- 4058-CTO, 22x, 4Sx
- 4061-CTO, 2Hx, 2Jx, 2Lx, 2Rx, 2Sx, 2Zx, 3Dx, 3Ex, 3Fx, 3Tx, 3Ux, 3Wx, 3Xx, 3Yx, 3Zx, 43x, 44x, 45x, 47x, 48x, 49x, 4Px, 4Ux, 4Vx, 4Wx, 4Zx, 52x, 53x
- 4062-CTO, 24x, 29x, 2Bx, 2Cx, 2Ex, 2Gx, 35x, 3Mx, 3Nx, 3Px, 3Qx, 3Rx, 3Sx, 4Jx, 4Kx, 4Tx, 4Xx, 4Yx, 55x
- 4063-CTO, 33x, 3Fx, 4Cx
- 4064-CTO, 2Vx
- 4065-CTO, 2Wx

Table 54. Parts list—Windows Vista Business (32 bit) recovery DVDs

Language	P/N	CRU ID
Brazilian Portuguese	58Y1913	*
Czech	58Y1916	
Danish	58Y1917	
English	58Y1939	
English (modem-disabled)	58Y1938	
English (for India)	58Y2093	
English, Finnish, and Swedish (in Sweden)	58Y1941	
English, French, German, and Dutch (in Belgium and Luxemburg)	58Y1940	
English, French, German, and Italian (in Switzerland)	58Y1942	
French	58Y1918	
German	58Y1920	
Greek	58Y1919	
Hebrew	58Y1921	
Hungarian	58Y1923	
Italian	58Y1924	
Japanese	58Y2625	
Korean	58Y1926	
Norwegian	58Y1927	
Polish	58Y1928	
Portuguese	58Y1929	
Romanian	58Y1931	
Russian	58Y1932	
Russian (English-enabled)	58Y1930	
Serbian-Latin	58Y1936	
Simplified Chinese	58Y1914	
Slovak	58Y1933	
Slovenian	58Y1934	
Spanish	58Y1935	
Traditional Chinese	58Y1915	
Traditional Chinese (Hong Kong S.A.R.)	58Y1922	
Turkish	58Y1937	

Windows Vista Business (64 bit) DVDs

Windows Vista Business (64 bit) is preinstalled as the operating system in the following models:

- 2055-CTO
- 2056-CTO
- 2081-CTO
- 2082-CTO
- 2083-CTO
- 2087-CTO
- 2088-CTO
- 2089-CTO
- 2241-CTO
- 2242-CTO
- 2243-CTO
- 2246-CTO
- 2247-CTO
- 2261-CTO
- 4058-CTO
- 4061-CTO, 32x, 3Vx, 42x, 46x, 4Bx, 4Qx, 4Rx
- 4062-CTO, 4Hx, 4Mx, 4Nx, 54x, 5Ux, 5Vx
- 4063-CTO, 34x
- 4064-CTO
- 4065-CTO

Table 55. Parts list—Windows Vista Business (64 bit) recovery DVDs

Language	**P/N**	**CRU ID**
English	58Y2073	*
English (modem-disabled)	58Y2072	
English (for India)	58Y2096	
German	58Y2070	
Japanese	58Y2629	
Simplified Chinese	58Y2069	

Windows Vista Ultimate (32 bit) DVDs

Windows Vista Ultimate (32 bit) is preinstalled as the operating system in the following models:

- 2055-CTO, 8Rx, 8Sx
- 2056-CTO
- 2081-CTO
- 2082-CTO
- 2083-CTO
- 2087-CTO
- 2088-CTO
- 2089-CTO
- 2241-CTO
- 2242-CTO, 26x, 4Gx
- 2243-CTO
- 2246-CTO
- 2247-CTO
- 2261-CTO
- 4058-CTO, 3Lx
- 4061-CTO, 2Mx, 2Nx, 2Px, 2Qx, 4Ax
- 4062-CTO, 2Ax, 3Gx, 3Hx
- 4063-CTO, 2Tx, 2Ux
- 4064-CTO
- 4065-CTO

Table 56. Parts list—Windows Vista Ultimate (32 bit) recovery DVDs

Language	P/N	CRU ID
Czech	58Y2048	*
Danish	58Y2049	
English	58Y2065	
English (modem-disabled)	58Y2090	
English, Finnish, and Swedish (in Sweden)	58Y2067	
English, French, German, and Dutch (in Belgium and Luxemburg)	58Y2066	
English, French, German, and Italian (in Switzerland)	58Y2068	
French	58Y2050	
German	58Y2052	
Greek	58Y2051	
Hebrew	58Y2053	
Hungarian	58Y2055	
Italian	58Y2056	
Japanese	58Y2628	
Korean	58Y2088	
Norwegian	58Y2057	
Polish	58Y2058	
Romanian	58Y2059	
Russian	58T2089	
Serbian-Latin	58Y2063	
Simplified Chinese	58Y2046	
Slovak	58Y2060	
Slovenian	58Y2061	
Spanish	58Y2062	
Traditional Chinese	58Y2047	
Traditional Chinese (Hong Kong S.A.R.)	58Y2054	
Turkish	58Y2064	

Windows 7 Home Basic (32 bit) DVDs

Windows 7 Home Basic (32 bit) is preinstalled as the operating system in the following models:

- 2055-CTO
- 2056-CTO
- 2081-CTO
- 2082-CTO
- 2083-CTO
- 2087-CTO
- 2088-CTO
- 2089-CTO
- 2241-CTO
- 2242-CTO, 7Lx, 7Ux
- 2243-CTO
- 2246-CTO
- 2247-CTO
- 2261-CTO
- 4058-CTO
- 4061-CTO
- 4062-CTO
- 4063-CTO
- 4064-CTO
- 4065-CTO

Table 57. Parts list—Windows 7 Home Basic (32 bit) recovery DVDs

Language	**P/N**	**CRU ID**
Brazilian Portuguese	58Y3208	*
English	58Y3215	
English (for India)	58Y4027	
Russian	58Y3211	
Russian (English-enabled)	58Y3210	
Serbian-Latin	58Y3213	
Simplified Chinese	58Y3209	
Spanish	58Y3212	
Turkish	58Y3214	

Windows 7 Home Premium (32 bit) DVDs

Windows 7 Home Premium (32 bit) is preinstalled as the operating system in the following models:

- 2055-CTO
- 2056-CTO
- 2081-CTO
- 2082-CTO
- 2083-CTO
- 2087-CTO
- 2088-CTO
- 2089-CTO
- 2241-CTO
- 2242-CTO, 7Vx
- 2243-CTO
- 2246-CTO
- 2247-CTO
- 2261-CTO
- 4058-CTO
- 4061-CTO
- 4062-CTO
- 4063-CTO
- 4064-CTO
- 4065-CTO

Table 58. Parts list—Windows 7 Home Premium (32 bit) recovery DVDs

Language	**P/N**	**CRU ID**
Brazilian Portuguese	58Y3216	*
Danish	58Y3219	
English	58Y3232	
English (modem-disabled)	58Y3231	
English (for India)	58Y4028	
English, Finnish, and Swedish (in Sweden)	58Y3234	
English, French, German, and Dutch (in Belgium and Luxemburg)	58Y3233	
English, French, German, and Italian (in Switzerland)	58Y3235	
French	58Y3220	
German	58Y3221	
Hebrew	58Y3222	
Japanese	58Y3224	
Korean	58Y3225	
Polish	58Y3226	
Russian	58Y3228	
Russian (English-enabled)	58Y3227	
Simplified Chinese	58Y3217	
Spanish	58Y3229	
Traditional Chinese	58Y3218	
Traditional Chinese (Hong Kong S.A.R.)	58Y3223	
Turkish	58Y3230	

Windows 7 Home Premium (64 bit) DVDs

Windows 7 Home Premium (64 bit) is preinstalled as the operating system in the following models:

- 2055-CTO
- 2056-CTO
- 2081-CTO
- 2082-CTO
- 2083-CTO
- 2087-CTO
- 2088-CTO
- 2089-CTO
- 2241-CTO
- 2242-CTO
- 2243-CTO
- 2246-CTO
- 2247-CTO
- 2261-CTO
- 4058-CTO
- 4061-CTO
- 4062-CTO
- 4063-CTO
- 4064-CTO
- 4065-CTO

Table 59. Parts list—Windows 7 Home Premium (64 bit) recovery DVDs

Language	P/N	CRU ID
English	58Y3241	*
English (for India)	58Y4029	
French	58Y3237	
German	58Y3238	
Japan	58Y3239	
Simplified Chinese	58Y3236	
Spanish	58Y3240	

Windows 7 Professional (32 bit) DVDs

Windows 7 Professional (32 bit) is preinstalled as the operating system in the following models:

- 2055-CTO, A6x, A9x, AHx, ALx, AMx, ANx, APx, AQx, ARx, ASx, ATx
- 2056-CTO
- 2081-CTO
- 2082-CTO, 96x, 99x, 9Fx, 9Gx, 9Hx, 9Jx, 9Nx, 9Px, 9Qx, ADx, AEx, AFx, AGx, BMx, BNx, BPx
- 2083-CTO
- 2087-CTO
- 2088-CTO, 3Zx, 42x, 43x, 44x
- 2089-CTO, 8Ex, 8Fx, 8Gx, 8Hx, 8Jx, 8Kx, 8Lx, 8Mx
- 2241-CTO
- 2242-CTO, 8Rx
- 2243-CTO, 7Yx, 8Vx, 8Yx, 92x, 94x, 95x, 96x, 97x, 99x, 9Bx, 9Cx, 9Dx, 9Ex, 9Fx, 9Gx
- 2246-CTO
- 2247-CTO
- 2261-CTO
- 4058-CTO
- 4061-CTO, 64x, 68x, 69x, 6Ax, 6Bx, 6Cx
- 4062-CTO, 57x, 58x, 59x, 5Cx, 5Jx, 5Lx, 5Nx, 5Rx, 5Tx, 5Yx, 5Zx, 62x, 63x
- 4063-CTO
- 4064-CTO
- 4065-CTO

Table 60. Parts list—Windows 7 Professional (32 bit) recovery DVDs

Language	**P/N**	**CRU ID**
Brazilian Portuguese	58Y3242	*
Czech	58Y3245	
Danish	58Y3246	
English	58Y3268	
English (modem-disabled)	58Y3267	
English (for India)	58Y4030	
English, Finnish, and Swedish (in Sweden)	58Y3270	
English, French, German, and Dutch (in Belgium and Luxemburg)	58Y3269	
English, French, German, and Italian (in Switzerland)	58Y3271	
French	58Y3247	
German	58Y3249	
Greek	58Y3248	
Hebrew	58Y3250	
Hungarian	58Y3252	
Italian	58Y3253	
Japanese	58Y3254	
Korean	58Y3255	
Norwegian	58Y3256	
Polish	58Y3257	
Portuguese	58Y3258	
Romanian	58Y3260	
Russian	58Y3261	
Russian (English-enabled)	58Y3259	
Serbian-Latin	58Y3265	
Simplified Chinese	58Y3243	
Slovak	58Y3262	
Slovenian	58Y3263	
Spanish	58Y3264	
Traditional Chinese	58Y3244	
Traditional Chinese (Hong Kong S.A.R.)	58Y3251	
Turkish	58Y3266	

Windows 7 Professional (64 bit) DVDs

Windows 7 Professional (64 bit) is preinstalled as the operating system in the following models:

- 2055-CTO, AJx, AKx
- 2056-CTO
- 2081-CTO
- 2082-CTO, BQx
- 2083-CTO
- 2087-CTO
- 2088-CTO
- 2089-CTO
- 2241-CTO
- 2242-CTO
- 2243-CTO
- 2246-CTO
- 2247-CTO
- 2261-CTO
- 4058-CTO
- 4061-CTO, 65x, 66x, 67x, 6Dx, 6Fx, 6Gx, 6Hx, 6Kx, 6Lx
- 4062-CTO, 5Fx, 5Gx, 5Px
- 4063-CTO
- 4064-CTO
- 4065-CTO

Table 61. Parts list—Windows 7 Professional (64 bit) recovery DVDs

Language	**P/N**	**CRU ID**
Danish	58Y3274	*
English	58Y3285	
English (for India)	58Y4031	
English, French, German, and Italian (in Switzerland)	58Y3286	
French	58Y3275	
German	58Y3276	
Hebrew	58Y3277	
Italian	58Y3279	
Japanese	58Y3280	
Korean	58Y3281	
Polish	58Y3282	
Simplified Chinese	58Y3272	
Spanish	58Y3283	
Traditional Chinese	58Y3273	
Traditional Chinese (Hong Kong S.A.R.)	58Y3278	
Turkish	58Y3284	

Common service tools

Table 62. Parts list—Common service tools

Tool	**P/N**
Screwdriver kit	95F3598
1/4″ drive spinner handle	1650840
1/4″ Sq. to 1/4″ hex torx adapter	93F2838
TR7-TR-10 tamper resistant torx bits	00P6967
Removal tool antenna RF connector	08K7159
USB 2.0 CD-RW/DVD-ROM combo drive II	40Y8687
USB cable	40Y8704
USB floppy diskette drive for maintenance diskette	05K9283
USB floppy diskette drive tool kit	27L3452
Test card for integrated Smart Card	42W7820
LENOVO ThinkPad Hardware Maintenance Diskette Version 1.76 or later **Note:** Download the file from the following Web site: `http://www.lenovo.com/spm`	—

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